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Jump to:

Welcome, Lu Anne Cottrill

Procurement | Budgeting | Accounts Receivable | Accounts Payable

Solicitation Response(SR) | Dept: 0506 | ID: ESR01031700000003012 | Ver.: 1 | Function: New | Phase: Final |  | Modified by batch , 01/03/2017

Header 1

List View

General Information | Contact | Default Values | Discount | Document Information

Procurement Folder: 206735

Procurement Type: Central Purchase Order

Vendor ID:

Legal Name: Nihon Kohden America Inc

Alias/DBA:

Total Bid: \$180,276.80

Response Date:

Response Time:

SO Doc Code: CRFQ

SO Dept: 0506

SO Doc ID: WEH1700000007

Published Date: 12/6/16

Close Date: 1/3/17

Close Time: 13:30

Status: Closed

Solicitation Description:

Total of Header Attachments: 1

Total of All Attachments: 1



Purchasing Division  
2019 Washington Street East  
Post Office Box 50130  
Charleston, WV 25305-0130

State of West Virginia  
Solicitation Response

Proc Folder : 206735  
Solicitation Description : Telemetry  
Proc Type : Central Purchase Order

Date issued	Solicitation Closes	Solicitation Response	Version
	2017-01-03 13:30:00	SR 0506 ESR01031700000003012	1

<b>VENDOR</b>
VS0000008564 Nihon Kohden America Inc

Solicitation Number: CRFQ 0506 WEH1700000007

Total Bid : \$180,276.80      Response Date: 2017-01-03      Response Time: 12:46:40

Comments:

<b>FOR INFORMATION CONTACT THE BUYER</b> April Battle (304) 558-0067 april.e.battle@wv.gov
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Signature on File	FEIN #	DATE
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All offers subject to all terms and conditions contained in this solicitation

Line	Comm Ln Desc	Qty	Unit Issue	Unit Price	Ln Total Or Contract Amount
1	Bedside Monitors	15.00000	EA	\$3,120.000000	\$46,800.00

Comm Code	Manufacturer	Specification	Model #
42181719			

Extended Description :	3.1.1 Bedside monitors
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Line	Comm Ln Desc	Qty	Unit Issue	Unit Price	Ln Total Or Contract Amount
2	Medical surgical wearable patient monitors	10.00000	EA	\$1,680.000000	\$16,800.00

Comm Code	Manufacturer	Specification	Model #
42181719			

Extended Description :	3.1.2 Medical surgical wearable patient monitors
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Line	Comm Ln Desc	Qty	Unit Issue	Unit Price	Ln Total Or Contract Amount
3	Information centers	3.00000	EA	\$35,025.600000	\$105,076.80

Comm Code	Manufacturer	Specification	Model #
42181719			

Extended Description :	3.1.3 Information centers
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**Comments:** 2 CNS = \$70,061.20  
1 RNS = \$ 5,880.00  
TOTAL = \$75,931.20

Line	Comm Ln Desc	Qty	Unit Issue	Unit Price	Ln Total Or Contract Amount
4	Warranty	1.00000	EA	\$0.000000	\$0.00

Comm Code	Manufacturer	Specification	Model #
84101503			

Extended Description :	3.1.4 Warranty
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Line	Comm Ln Desc	Qty	Unit Issue	Unit Price	Ln Total Or Contract Amount
5	Manual/CDs	1.00000	EA	\$0.000000	\$0.00

Comm Code	Manufacturer	Specification	Model #
55101521			

Extended Description :	3.1.5 Manual/CDs
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Line	Comm Ln Desc	Qty	Unit Issue	Unit Price	Ln Total Or Contract Amount
6	Installation	1.00000	EA	\$11,600.000000	\$11,600.00

Comm Code	Manufacturer	Specification	Model #
81111809			

Extended Description :	3.1.6 Installation
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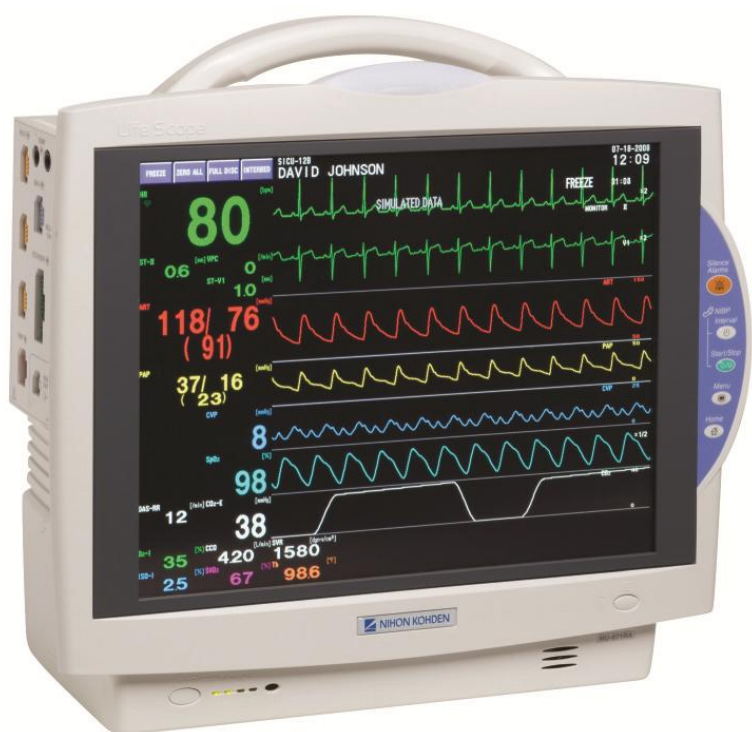
Line	Comm Ln Desc	Qty	Unit Issue	Unit Price	Ln Total Or Contract Amount
7	In-service medical staff	1.00000	EA	\$0.000000	\$0.00

Comm Code	Manufacturer	Specification	Model #
86000000			

Extended Description :	3.1.7 In-service medical staff
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# Nihon Kohden America

## A Quality Patient Monitoring and Telemetry Solution for Welch Community Hospital - State of West Virginia Department of Administration, Purchasing



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January 3, 2017

Welch Community Hospital  
State of West Virginia, Department of Administration, Purchasing Division  
2019 Washington Street East  
Charleston, WV 25305-0130  
Attn: April Battle, Buyer 22

Re: SOLICITATION NO: CRFQ 0506 WEH1700000007

Dear Ms. Battle:

Nihon Kohden America, Inc. ("NKA") is pleased to furnish this document highlighting our patient monitoring solution for the State of West Virginia, Department of Administration, Purchasing ("State of WV"). NKA creates robust systems that can accommodate the monitoring of patients from virtually *any* location, and has the built-in flexibility needed to handle changes in staffing and acuity levels. This scalable model, composed of affordable, superior monitoring equipment, offers the functionality, reliability and value that can allow the State of WV to attain both long term financial performance, and patient care quality improvements.

Our products are high quality, well designed and engineered *for nurses by nurses*, offering exceptional reliability. **NKA also supplies a five-year warranty on all of our bedside monitors, telemetry transmitters and receivers; and a two-year warranty on central stations as standard services.** Our business model allows for a focus on clinical utilization, while helping you achieve financial predictability, and insuring transparency throughout the partnership.

NKA's core purpose, our drive, has always been to design and build medical devices that increase patient care quality, while delivering measurable savings to the hospitals we serve. By providing more cost-efficient, state-of-the-art solutions, we enable hospitals to do *more*—to achieve a level of operational and financial performance that translates into more patients served, and more lives saved.

We welcome the chance to discuss our offerings in further detail.

Sincerely,



Michael Stone  
Senior Vice President of Sales Operations

## Table of Contents

Executive Summary .....	1
<b>Welch Community Hospital Specifications - Response from Nihon Kohden ....</b>	<b>4</b>
Patient Monitoring Solutions .....	25
Service and Warranty .....	38
Additional Value Added Services.....	39
Appendix A: State of WV - Pricing Page and Nihon Kohden's Detailed Quote	
Appendix B: State of WV - CRFQ_WV – Request for Quotation	
Appendix C: State of WV - Terms and Conditions and Addendum Acknowledgement	
Appendix D: State of WV - Purchasing Affidavit	
Appendix E: State of WV - HIPAA Business Associate Addendum	
Appendix F: State of WV - Provisions Required for Federally Funded Procurements	
Appendix G: Nihon Kohden Product Literature	

## Executive Summary

Nihon Kohden America, Inc. ("NKA") develops advanced patient monitoring solutions that deliver the greatest value, and lowest cost of ownership, while improving the quality of patient care. With a singular focus on patient monitoring, and a thorough understanding of the challenges faced by the hospitals we serve, NKA empowers customers to improve their financial performance and quality of service at every level of care.

- **The NKA Value Proposition.** NKA's full line of state-of-the-art patient monitoring and transmitter product lines deliver advanced clinical capabilities that enhance efficiency and productivity, providing clinicians with the vital information needed to assess and treat patients at the point of care, and anywhere in the hospital. Utilizing electronics miniaturization and advanced software development manufacturing techniques, NKA has been able to continuously offer these sophisticated monitoring solutions at list prices that are historically 30% less than our competitors, allowing health care organizations to maximize equipment expenditures.

### *Advanced capabilities as standard features:*

Patient Monitors & Transmitters	Central Stations	Networking
<ul style="list-style-type: none"> <li>• 72 hours of five waveform Full Disclosure</li> <li>• 72 hours of minute-to-minute ST recall samples in all leads</li> <li>• 16348 Arrhythmia Recall files for 72 hours</li> <li>• 72 hours tabular and graphical trends</li> <li>• Sophisticated arrhythmia algorithms</li> <li>• Multi-parameter full disclosure wave forms</li> <li>• A true diagnostic and interpretative 12-lead ECG capability</li> <li>• Next generation multi-lead arrhythmia monitoring</li> <li>• Hemodynamic and pulmonary calculations</li> <li>• 12-lead ST-segment analysis with alarms</li> <li>• Alarm History Recall display</li> <li>• Color LCD displays on all telemetry transmitters</li> <li>• Respiration monitoring on all telemetry transmitters</li> <li>• Touch screen displays with common user interface</li> <li>• "Acuity-adaptable technology"</li> </ul>	<ul style="list-style-type: none"> <li>• 120-hour, sixteen-waveform Full Disclosure</li> <li>• Interpretive diagnostic 12-lead ECG review and management, 64 per patient</li> <li>• 120 hours of both graphic and tabular trends</li> <li>• Comprehensive report generating capabilities</li> <li>• Touch screen capability</li> <li>• Archiving capabilities to enable review or readmission of the last 300 discharged patients for a 120 hour period.</li> <li>• 1,500 arrhythmia recall files per patient</li> <li>• 10,000 event list storage per patient</li> </ul>	<ul style="list-style-type: none"> <li>• NKA Devices can reside on the hospital-provided dedicated network</li> <li>• Networked bedside monitors and tele transmitters able to report to a central station</li> <li>• Patient-centric data transfer of all waveform, alphanumeric, trended and stored information (arrhythmia and ST-segment history, full disclosure, 12-lead ECG, etc.) throughout the entire networked system. (Admitted patient's stored data moves with them throughout the departments with no need for additional hardware or servers</li> <li>• Secure Physician Remote Access. NetKconnect allows for clinical information to reach the physicians and clinicians earlier, enabling quicker diagnosis and treatment</li> </ul>

- **The Low Cost of Ownership.** NKA offers the lowest total cost of ownership and greatest value of any monitoring solution provider. Our products are full-featured, with no additional licensing fees or hidden costs for software options—and they're backed by a five-year parts and labor warranty. We offer complimentary software upgrades and enhancements, plus technical support for the life of each system. And we deliver free go-live and long-term clinical support, as well as online and onsite training, with unlimited tuition offerings for the duration of equipment ownership.
- **The Next Tier in Quality Care: Prefense Defensive Monitoring™.** Always focused on meeting the two key challenges of every health care organization—improving quality and controlling costs—NKA has developed Prefense™, the world's first Early Detection and Notification System™. Prefense allows medical personnel to track trends in vital statistics with a simplified, easy-to-use low-acuity detection system. Hospital patients can freely ambulate while measuring respiration, oxygen saturation, heart rate and non-invasive blood pressure. This wireless ambulatory Defensive Monitoring™ solution guarantees the achievement of a higher quality of care and a reduction in costly, unplanned transfers to ICU or Telemetry, resulting in better bed utilization and throughput. A smoothing algorithm incorporated into Prefense has also been proven to reduce false alarms by greater than 80%—allowing nurses to spend more time on patient care without having to respond to an inordinate amount of false alarms.

NKA is continuously recognized for delivering cost-effective, quality products; technologies that drive core business improvements.

Formed in 1979, NKA is a wholly owned subsidiary of Nihon Kohden Corporation, Japan's leading manufacturer, developer and distributor of electronic medical equipment. Manufacturing and providing medical equipment since 1951, Nihon Kohden's history of innovation has positioned it internationally as a premier supplier of quality products, and Japan's most established company in the industry.

With annual revenue exceeding one billion dollars, Nihon Kohden is one of the top 100 companies in the world that manufactures and sells medical equipment, and one of the top 10 companies that specializes in medical devices.

As a major worldwide supplier of physiological patient monitoring equipment Nihon Kohden is continuously working on new products designed to meet the future requirements of hospitals worldwide. These products and their features and capabilities are based on input from our existing and potential customers to insure that Nihon Kohden maintains our position as a market leader in innovative technologies.

Listed below are some of the key product innovations that Nihon Kohden has introduced over the last 65 years of which is indicative of the innovation that Nihon Kohden will maintain in the future:

- 1951: World's first eight-channel direct writing EEG which was completely AC powered.
- 1952: Cerebral artery pressure meter.
- 1957: World's first EMG system.
- 1960: Multi-purpose polygraph with recorder.

- 1965: World's first medical data processor of ECG, EEG, EMG and EP data.
- 1965: Japan's first battery powered defibrillator.
- 1966: ICU patient monitoring system.
- 1972: Blood cell counter.
- 1974: Pulse Oximetry invented by Nihon Kohden.
- 1979: World's first microprocessor controlled EEG with CRT screen.
- 1980: Telephone access ECG analysis system.
- 1984: World's first bedside monitors with arrhythmia as a standard feature.
- 1988: World's first multi-parameter defibrillator with arrhythmia detection.
- 1994: World's first Windows based digital EEG.
- 1999: World's first less-invasive blood volume monitor.
- 2000: World's first 192 channel EEG system.
- 2002: World's first bedside monitor to include full disclosure.
- 2004: World's first mainstream CO2 system for non-intubated patients.
- 2006: World's first patient worn ambulatory monitoring device for ECG, Respiratory, SpO2, NIBP monitoring.
- 2007: World's first Mainstream CO2 Monitoring for Non-intubated Patients.
- 2008: World's first Early Detection and Notification System that allows patients to ambulate while monitoring heart rate, SpO2, respiration and blood pressure. (Four of the seven critical parameters that trigger a Rapid Response Team.)
- 2013: Released bedside monitor BSM-1700 which is the world's smallest fully featured transport monitor.
- 2016: Released Life Scope G9 bedside monitor.
- 2016: Continuing to improve patient care quality now and in the future...

NKA would be willing to have detailed discussions with the hospital regarding future products but such discussions would need to be held under a signed Non-Disclosure Agreement.

### **What Do Independent Surveys Say About Nihon Kohden?**

At NKA, our commitment to quality is second to none. We constantly listen to our customer's concerns and resolve them through the application of pivotal technologies. This is one of the major reasons that NKA consistently ranks among the best patient monitoring companies in multiple surveys.

NKA has maintained consistently high ratings with both MD Buyline and MSP. In the case of MD Buyline, NKA has ranked 1<sup>st</sup> among major competitors in patient monitoring or telemetry for 10 consecutive years.

REQUEST FOR QUOTATION  
CRFQ 0506 WEH1700000007  
**Telemetry System**

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**SPECIFICATIONS**

1. **PURPOSE AND SCOPE:** The West Virginia Purchasing Division is soliciting bids on behalf of West Virginia Department of Health and Human Resources (WVDHHR), Bureau for Behavioral Health and Health Facilities (BHBF), Welch Community Hospital to establish a contract for the one time purchase of one time purchase of fifteen (15) bedside monitors, ten (10) medical surgical wearable patient monitors, and three (3) information centers. Vendor is to provide installation and in-service training for medical staff.

NOTE: This request is covered in part or in whole by federal funds. All bidders will be required to acknowledge and adhere to Attachment 1-Provisions Required for Federally Funded Procurements. Delivery Orders issued from contract awarded as a result of this solicitation may be funded in whole or in part with Federal Funds and thus this solicitation and its resulting awarded contract are subject to the requirements of Attachment 1: Provisions required for federally Funded Procurements.

[NKA Response: Acknowledged and agreed.](#)

2. **DEFINITIONS:** The terms listed below shall have the meanings assigned to them below. Additional definitions can be found in section 2 of the General Terms and Conditions.
  - 2.1 **“Contract Item”** means one time purchase of fifteen (15) bedside monitors, ten (10) medical surgical wearable patient monitors, and three (3) information centers as more fully described by these specifications.
  - 2.2 **“Contract Services”** means to provide installation and in-service training of medical staff as more fully described in these specifications.
  - 2.3 **“Pricing Page”** means the pages, contained in wvOASIS or attached as Exhibit A, upon which Vendor should list its proposed price for the Contract Items.
  - 2.4 **“Solicitation”** means the official notice of an opportunity to supply the State with goods or services that is published by the Purchasing Division.



### 3. GENERAL REQUIREMENTS:

**3.1 Mandatory Contract Item Requirements:** Contract Item must meet or exceed the mandatory requirements listed below.

**3.1.1 Bedside Monitors (Fifteen [15 ] in total-Seven [7] for Intensive Care Unit [ICU], Seven [7] for Emergency Department [ED], One [1] Post Anesthesia Care Unit[PACU])** must meet or exceed the mandatory requirements listed below. Bedside monitors proposed for this opportunity shall comply with the following specifications:

#### 3.1.1.1 Measurement Features:

- 3.1.1.1.1** Must have electrocardiogram (ECG) monitoring  
NKA Response: NKA patient monitors can operate with 3, 6 or 10 electrode ECG cables.
- 3.1.1.1.2** Must have twelve (12)-lead ECG monitoring.  
NKA Response; NKA monitors perform true diagnostic quality 12 lead ECG using 10 electrodes.
- 3.1.1.1.3** Must have multi-lead arrhythmia and ST segment analysis at the bedside on all available leads.  
NKA Response: Yes, multi-lead arrhythmia analysis and up to 12 lead ST detection is standard on all bedside monitors.
- 3.1.1.1.4** Must have QT/QTc (Q-wave T-wave/Q-wave T-wave interval correction) interval monitoring.  
NKA Response: Yes, all of these parameters are available through the caliper function of the CNS-6200 Central Station.
- 3.1.1.1.5** Must have capnography extensions to extend measurement capability by adding mainstream or side stream carbon dioxide (CO<sub>2</sub>), a pressure and an additional pressure or temperature measurement plus optional cardiac output.  
NKA Response: Yes, Nihon Kohden monitors use Smart Cable technology that allows for flexible monitoring parameters without having to add expensive extensions. Parameters available throughout the Smart Cable system include Main stream CO<sub>2</sub> monitoring for both intubated and non-intubated patients, invasive blood pressure, cardiac output, BIS monitoring, additional temperature measurements, and O<sub>2</sub> measurements.
- 3.1.1.1.6** Must have pulse oximetry technologies for accurate performance even in cases with low perfusion.  
NKA Response: Yes, Masimo Set, Nellcor Oxymax or Nihon Kohden SpO<sub>2</sub> technologies are available.

- 3.1.1.1.7** Must have pulse pressure variation (PPV) that can be calculated from beat to beat arterial pressure waves.  
NKA Response: Yes, standard feature in all bedsides.

**3.1.1.2 Usability Features:**

- 3.1.1.2.1** Must have menu hierarchy for access to all basic monitoring tasks.  
NKA Response: Yes, all features are available through the Menu system but additionally, NKA monitors offer direct access to most features that allow simple one touch access to the most common user functions.
- 3.1.1.2.2** Must have patient management with tabular and graphic trends.  
NKA Response: Yes, graphical and tabular trends are standard features at the bedside monitor and central station. All parameters are trended for up to 120 hours.
- 3.1.1.2.3** Must have ventilation, hemodynamic and oxygenation calculations.  
NKA Response: Yes, these are standard features of NKA monitors.
- 3.1.1.2.4** Must have a drug calculator.  
NKA Response: Yes, this is a standard feature of NKA monitors.
- 3.1.1.2.5** Must have settings profile functionality.  
NKA Response: Yes, this is a standard feature of NKA monitors.
- 3.1.1.2.6** Must have automatic alarm limits.  
NKA Response: Yes, this is a standard feature of NKA monitors.
- 3.1.1.2.7** Must have capability to silence alarms from bedside.  
NKA Response: Yes, this is a standard feature of NKA monitors.
- 3.1.1.2.8** Must have multiple input devices: Touchscreen, mouse, and keyboard.  
NKA Response: Yes, wireless remote control is also available.
- 3.1.1.2.9** Must have a minimum of a ten (10) inch to a maximum nineteen (19) inch display with wide viewing angle, large numerics, and visible alarm limits with real time wave forms.  
NKA Response: NKA can offer either 10" or 12" displays that provide wide viewing angle, large numerics, permanently visible alarm limits and the ability to view up to 15 waveforms.
- 3.1.1.2.10** Must have graphical measurement windows showing which measurements are being used by which device.  
NKA Response: Yes, the main viewing window displays all measurements that are being used by the device.

### **3.1.1.3 Intended Use:**

- 3.1.1.3.1** The monitors must be able to be used for monitoring, recording and alarming of multiple physiological parameters of adults and pediatrics in a hospital environment.

NKA Response: Yes, additionally all NKA monitors offer the ability to monitor neonatal patients. All patient profiles and site profiles (OR, ICU, NEONATAL, etc) are included in the basic software with no additional charge.

### **3.1.1.4 Modularity:**

- 3.1.1.4.1** Shall have the ability to function as stand-alone or networked.

NKA Response: Yes, all NKA monitors can function as a standalone or a networked monitor. When functioning as a standalone monitor full functionality such as advanced arrhythmia detection and recall, ST detection and recall, multi-wave full disclosure, etc. is still available.

### **3.1.1.5 Upgradability:**

- 3.1.1.5.1** Shall have the ability to be updated as practices and technologies advance.

NKA Response: Yes, NKA provides all software updates including feature enhancement software at no charge for the life of the monitor.

### **3.1.1.6 Main Components:**

- 3.1.1.6.1** The monitors must have color Liquid Crystal Display (LCD) displays with a wide viewing angle, providing high resolute waveform and data presentation.

NKA Response: Yes, standard feature.

- 3.1.1.6.2** The user interface must be designed for operation.

NKA Response: Yes, standard feature.

- 3.1.1.6.3** Must have keys with icons allowing monitoring task to be performed directly on the monitor screen.

NKA Response: Yes, standard feature.

- 3.1.1.6.4** The monitors must display a minimum of six (6) measurement waves simultaneously.

NKA Response: Yes, NKA monitors offer 15 waveform display.

- 3.1.1.6.5** The twelve (12)-lead ECG monitoring must display twelve (12) real-time ECG waves, with a rhythm strip and all ST values.

NKA Response: Yes, standard feature.

**3.1.1.6.6** Must have multiple input devices such as mouse, track ball or barcode reader.

NKA Response: Yes, barcode reader is optional.

**3.1.1.6.7** Must have mounting options for flexible space saving placement of the monitor.

NKA Response: Yes, many different mounting configurations are available.

### **3.1.1.7 Applications and Features:**

**3.1.1.7.1** The monitor must have multi-lead arrhythmia detection analysis on the patient's ECG waveform at the bedside. It must analyze for ventricular arrhythmias, calculate heart rate and generate alarms, including asystole, bradycardia, and ventricular fibrillation.

NKA Response: All NKA monitors include as a standard feature, advanced multi-lead arrhythmia detection and recall function that allows for the detection of 23 different arrhythmia events including the listed asystole, bradycardia and ventricular fibrillation.

**3.1.1.7.2** Shall have a minimum of twelve (12) leads of ST segment analysis that can be performed at bedside measuring ST elevation and depression generating alarms and events. Must have ability to trend ST changes, set high and low alarm limits, and set both ST and isoelectric measurement points.

NKA Response: Yes, standard feature on all NKA bedside monitors.

**3.1.1.7.3** Must have QT/QTc interval monitoring that provides the measured QT interval, the calculated heart-rate, corrected QTc value and a QTc value, which tracks variation in the QT interval in relation to a baseline value.

NKA Response: Yes, all of these parameters are available through the caliper function of the CNS-6200 Central Station.

**3.1.1.7.4** Must have twelve (12) -level ECG capability with twelve (12) real-time ECG waveforms that can be displayed simultaneously.

NKA Response: Yes, standard feature on all NKA bedside monitors.

**3.1.1.7.5** Must have pulse oximetry technology to perform accurately even in cases of low perfusion.

NKA Response: Yes, Masimo Set, Nellcor Oxymax or NKA SpO<sub>2</sub> technologies are available.

**3.1.1.7.6** Must have choice of mainstream, side-stream and mainstream CO<sub>2</sub> monitoring for high quality measurements with intubated and non-intubated patients.

NKA Response: NKA offers the cap-ONE CO<sub>2</sub> system that provides mainstream CO<sub>2</sub> monitoring that can be used for intubated and non-intubated patients. If side stream CO is required, we can provide Oridion MicroStream CO<sub>2</sub> monitoring with our monitors.

- 3.1.1.7.7** Must have drug calculator to help manage intravenous (IV) drug infusions by calculating drug dose, rate, amount, volume, concentration, and standardized rate.  
**NKA Response:** Yes, standard feature on all NKA bedside monitors.
- 3.1.1.7.8** Drug calculator must have ability to include a list of commonly used drugs.  
**NKA Response:** Yes, standard feature on all NKA bedside monitors.
- 3.1.1.7.9** Events must be stored in a database for review and documented in a report or in a recording.  
**NKA Response:** Yes, standard feature on all NKA bedside monitors.
- 3.1.1.7.10** Screen layouts must be adjustable, allowing flexible display of measurement information.  
**NKA Response:** Yes, standard feature on all NKA bedside monitors.
- 3.1.1.7.11** Previous/next screen function must provide access to a minimum five (5) most recently modified screens.  
**NKA Response:** Yes, standard feature on all NKA bedside monitors.
- 3.1.1.7.12** Temperature, height and weight must have option of configuration metric or imperial units.  
**NKA Response:** Yes, standard feature on all NKA bedside monitors.
- 3.1.1.7.13** Pressure and gas measurements must have option to be displayed in both KPa (kilopascal) or displayed in mmHg (millimeter of Mercury).  
**NKA Response:** Yes, standard feature on all NKA bedside monitors.
- 3.1.1.7.14** The trends database must store a minimum of sixteen (16) measurement memories to a maximum of thirty-two (32). The measurement information must have the ability to be sampled at an interval of twelve (12) seconds, one (1) minute, or five (5) minutes, and stored for a minimum of forty-eight (48) hours.  
**NKA Response:** Yes, standard feature on all NKA bedside monitors.
- 3.1.1.7.15** Tabular trends (vital signs) must show dates for a minimum of sixteen (16) measurement memories in a tabular form.  
**NKA Response:** Yes, standard feature on all NKA bedside monitors.
- 3.1.1.7.16** The monitor must have capability to be portable for in-hospital transport.  
**NKA Response:** Yes, standard feature on all NKA bedside monitors.
- 3.1.1.7.17** Monitor must not exceed a maximum weight of ten and a half (10 ½) kilograms (kg).  
**NKA Response:** NKA's BSM-3500 series monitors weigh approximately 6.2 kilograms.

- 3.1.1.7.18** The monitor must operate a minimum of four (4) hours on battery power.  
**NKA Response:** The BSM-3500 series monitor operates up to 90 minutes on battery power.
- 3.1.1.7.19** The monitor must allow the transition from bedside monitoring to transport with no need to disconnect patient cables or adjust any settings.  
**NKA Response:** Yes, NKA provides a Data Transport function which allows a continuous patient record both at the bedside monitor and the central station during transport.
- 3.1.1.7.20** Admit, discharge and transfer information must be shared between the networked monitor and information center.  
**NKA Response:** Yes, standard feature on all NKA bedside monitors.
- 3.1.1.7.21** Printers must have ability to print the following patient reports:
- |                      |                                   |
|----------------------|-----------------------------------|
| <b>3.1.1.7.21.1</b>  | Event review and episodes reports |
| <b>3.1.1.7.21.2</b>  | Twelve (12) -lead ECG reports     |
| <b>3.1.1.7.21.3</b>  | Alarm limits reports              |
| <b>3.1.1.7.21.4</b>  | Vital sign reports                |
| <b>3.1.1.7.21.5</b>  | Graphic trends                    |
| <b>3.1.1.7.21.6</b>  | Cardiac output reports            |
| <b>3.1.1.7.21.7</b>  | Wedge procedure reports           |
| <b>3.1.1.7.21.8</b>  | Calculation reports               |
| <b>3.1.1.7.21.9</b>  | Drug calculation reports          |
| <b>3.1.1.7.21.10</b> | Real-time wave reports            |
- NKA Response:** Yes, standard feature on all NKA bedside monitors.
- 3.1.1.7.22** Report templates must have ability to be tailored to hospital's specific requirements.  
**NKA Response:** Yes, standard feature on all NKA bedside monitors.
- 3.1.1.7.23** Monitor must have ability to print on locally or centrally-connected printers.  
**NKA Response:** Yes, standard feature on all NKA bedside monitors.
- 3.1.1.7.24** Alarm limits must be permanently visible on main screen.  
**NKA Response:**
- 3.1.1.7.25** Alarm limits must provide graphic depiction of alarm limits in relation to the currently monitored measurement values and alarm limits must be adjustable.  
**NKA Response:** Yes, standard feature on all NKA bedside monitors.
- 3.1.1.7.26** When alarm limits are exceeded, must have multiple ways of alerting staff.  
**NKA Response:** Yes, standard feature on all NKA bedside monitors.

**3.1.1.7.27** Alarms must have ability to be paused for a period of one (1), two (2), three (3), five (5), ten (10) minutes, or indefinitely.  
NKA Response: Yes, standard feature on all NKA bedside monitors.

**3.1.1.7.28** Monitors must have ability to be part of a wired or wireless hospital network system.  
NKA Response: Yes, standard feature on all NKA bedside monitors.

#### **3.1.1.8 Clinical Calculation Set.**

**3.1.1.8.1** Must have clinical calculation sets that include hemodynamic, oxygenation and ventilation.  
NKA Response: Yes, standard feature on all NKA bedside monitors.

#### **3.1.1.9 Information Centers Three (3)**

**3.1.1.9.1** Must have a minimum nineteen inch (19”) to a maximum thirty-two inch (32”) non-touch display.  
NKA Response: NKA’s CNS-6200 Central Stations are provided with 24” touchscreen displays as a standard item. If touchscreen is not required we can disable it for the Hospital.

**3.1.1.9.2** Must have information center universal serial bus (USB) recorder.  
NKA Response: Yes, standard feature on all NKA bedside monitors.

**3.1.1.9.3** Must have an information center printer.  
NKA Response: Yes, standard feature on all NKA bedside monitors.

**3.1.1.9.4** Main screen displays must have waveforms and parameters for a minimum of eight (8) patients.  
NKA Response: Yes, the NKA CNS-6200 central station can display up to 16 patients on a single display.

**3.1.1.9.5** Must have a minimum two (2) channel recorder to a maximum four (4) channel recorder.  
NKA Response: Yes, standard feature on all NKA bedside monitors.

**3.1.1.9.6** Must have a clinical review application to provide a detailed retrospective analysis of patient’s condition.  
NKA Response: Yes, standard feature on all NKA bedside monitors.

**3.1.1.9.7** Must include all necessary PC hardware and connections.  
NKA Response: Yes, standard feature on all NKA bedside monitors.

**3.1.1.9.8** Must have upgradeability.  
NKA Response: NKA provides all software updates including feature enhancement software at no charge for the life of the monitor.

#### **3.1.2**

**3.1.3 Medical Surgical Wearable Patient Monitors** must meet or exceed the mandatory requirements listed below.

**3.1.3.1 Monitors:**

- 3.1.3.1.1** Must have continuous electrocardiogram (ECG) monitoring with pulse oximetry option.  
NKA Response: Yes, standard feature.
- 3.1.3.1.2** Must have color touch screen display.  
NKA Response: Yes, standard feature.
- 3.1.3.1.3** Must have automatic sleep mode to conserve battery while maintaining privacy.  
NKA Response: Yes, standard feature.
- 3.1.3.1.4** Must have ability to view patient status with a single touch.  
NKA Response: Yes, standard feature.
- 3.1.3.1.5** Must have a minimum (2) channel of real time waveform.  
NKS Response: Yes, standard feature. NKA transmitters offer the ability to view four real time waveforms.
- 3.1.3.1.6** Must have a minimum four (4) screen formats.  
NKA Response: Yes, standard feature.
- 3.1.3.1.7** Must have flexible monitoring parameters.  
NKA Response: Yes, standard feature.
- 3.1.3.1.8** Must have wide variety of measurements including ECG and SP0<sub>2</sub>.  
NKA Response: Yes, standard feature.
- 3.1.3.1.9** Must have ability to use disposable or rechargeable batteries.  
NKA Response: Yes, standard feature.
- 3.1.3.1.10** Must have battery status display on device and information center.  
NKA Response: Yes, standard feature.

**3.1.3.2 Alarms:**

- 3.1.3.2.1** Must display alarms for ECG and SPO<sub>2</sub>.  
NKA Response: Alarms are displayed at the CNS-6200 Central Station.
- 3.1.3.2.2** Must have touch review of current alarm settings, alarm histories, vital trends or activate monitor from sleep mode.  
NKA Response: Alarm setting, histories, and vital trends are displayed at the CNS-6200 Central Station.



### **3.1.3.3 Hospital Acquired Infections:**

**3.1.3.3.1** Must have connectors that reduce collection of soils and liquids.

NKA Response: Yes, standard feature with NKA.

**3.1.3.3.2** The device must be smooth to allow wiping and support cleaning by a variety of standard low to high-level disinfectants.

NKA Response: Yes, standard feature with NKA.

**3.1.3.3.3** Must have reusable lead sets.

NKA Response: Yes, standard feature with NKA.

**3.1.4 Information Center Description** must meet or exceed the mandatory requirements listed below.

**3.1.4.1** Must have main screen for displaying real-time waves and parameters for a minimum of ten (10) patients.

NKA Response: NKA's CNS-6200 Central Station can display up to 16 patients on a single display.

**3.1.4.2** Must have separate patient window for viewing detailed real-time or stored data for individual patient.

NKA Response: Yes, standard feature with NKA.

**3.1.4.3** Must have central review station for reviewing a minimum of seventy-two (72) hours of stored patient monitoring data and a minimum of one hundred (100), thirty (30) second alarm records and saved strips, with a minimum of four (4) waves per event.

NKA Response: Yes, standard feature with NKA central stations. 120 hours of stored patient monitoring data with over 10,000 alarm records per patient and strips of up to 16 waveforms.

**3.1.4.4** Must support the telemetry system.

NKA Response: Yes, standard feature with NKA.

**3.1.4.5** Must support telemetry patient monitor.

NKA Response: Yes, available when using the HL7 Gateway server.

**3.1.4.6** Must support cable-less measurements.

NKA Response: Yes, some parameters such as ECG must have cables to attach the ECG electrodes and other parameters such as NIBP are cable-less.

**3.1.4.7** Must support wearable patient monitor.

NKA Response: Yes, standard feature.

**3.1.4.8** Must have web server that permits viewing of stored and viewable patient data from browser equipped personal computers (PCs) by way of hospital's information center.

NKA Response: Yes, data can be viewed through personal PC or through IOS devices.

- 3.1.4.9** Must have name and patient identification information from hospital information center when clinical data server is present.  
**NKA Response:** Yes, available when using the HL7 Gateway server.
- 3.1.4.10** Must have real-time and stored patient monitoring data which includes full disclosure wave forms and parameters, alarms, multi-lead arrhythmia, ST segments events and trends.  
**NKA Response:** Yes, standard feature with NKA.
- 3.1.4.11** Must have configurable central reports for one (1) or more patients that can be generated on demand or on a scheduled internal basis.  
**NKA Response:** Yes, standard feature with NKA.
- 3.1.4.12** Must support printing of a predefined set of reports.  
**NKA Response:** Yes, standard feature with NKA.
- 3.1.4.13** Must have tabular and graphical trend review.  
**NKA Response:** Yes, standard feature with NKA.
- 3.1.4.14** Must support device locator option which remotely identifies the location of the telemetry devices.  
**NKA Response:** Yes, though third party locator systems.
- 3.1.4.15** Must support communication with wired and wireless patient monitor.  
**NKA Response:** Yes, standard feature with NKA.
- 3.1.4.16 Patient Monitoring Data:**
- 3.1.4.16.1** Must have patient data (waves, parameters, and alarms) obtained from patient monitors – (hard wired, wireless, telemetry) connected to the clinical network.  
**NKA Response:** Yes, standard feature with NKA.
- 3.1.4.17 Patient Data Display:**
- 3.1.4.17.1** Must have patient monitoring data viewed on main screen and in more detail on a separate patient window.  
**NKA Response:** Yes, standard feature with NKA.
- 3.1.4.17.2** The main screen must display real-time waveforms, numeric and alarms for a minimum of ten (10) patients.  
**NKA Response:** Yes, standard feature with NKA; up to 16 patients.
- 3.1.4.17.3** Must have display a minimum of thirty-two (32) waveforms in either single or dual column formats.  
**NKA Response:** Yes, standard feature with NKA.
- 3.1.4.17.4** Must have patient window directly accessible from main screen with greater data detail.  
**NKA Response:** Yes, standard feature with NKA.

**3.1.4.18 Alarm Response:**

- 3.1.4.18.1** Must have color coding – capability to visually identify a patient in alarm and its severity on the main screen.
- 3.1.4.18.2** Must have multi-level, audible alarm tones that indicate alarms and their severity.
- 3.1.4.18.3** Must have ability to review most recent alarm and print strip immediately.
- 3.1.4.18.4** Must have ability to modify alarms with password protection.
- 3.1.4.18.5** Must have ability to turn off alarm.

NKA Response: Yes, standard feature with NKA.

**3.1.4.19 Cableless Measurements:**

- 3.1.4.19.1** Measurement must be displayed on information center monitoring telemetry, recording and alarming arterial oxygen saturation, pulse rate, blood pressure (adult and pediatric).

NKA Response: Yes, all parameters are displayed when using the ZM-0540PA wireless monitor.

**3.1.4.20 Recording and Printing:**

- 3.1.4.20.1** Must have a two (2) Channel USB recorder that can record a minimum of one (1) and/or a maximum of two (2) real-time or delayed waveforms.
- 3.1.4.20.2** Must have a minimum of fifty millimeter (50 mm) wall thermal array recorder that provides high resolution, high quality waveforms.
- 3.1.4.20.3** Must print grid and waveforms simultaneously to assure accurate registration.
- 3.1.4.20.4** Recorder must have capability to record a minimum of two waveforms and a minimum of three lines of annotations.

NKA Response: Yes, standard feature with NKA.

**3.1.4.21 User Configuration:**

- 3.1.4.21.1** Monitoring controls, display formats, alarm response and patient data must have ability to be configured to user performances with configuration tools.
- 3.1.4.21.2** Must have unit-wide configurations that are in password protected applications that can be modified for individual patients.

NKA Response: Yes, standard feature with NKA.

**3.1.4.22 On-Line Help:**

- 3.1.4.22.1** Must have on-line help available for both clinical application and service functions.

NKA Response: Yes, standard feature with NKA.

### **3.1.4.23 Arrhythmia Monitoring:**

**3.1.4.23.1** Must have multi-lead arrhythmia monitoring on user selected primary and secondary leads.

**NKA Response:** Yes, standard feature with NKA.

**3.1.4.23.2** Must have arrhythmia detector of the following alarms:

**3.1.4.23.2.1** Asystole

**3.1.4.23.2.2** Ventricular fibrillation

**3.1.4.23.2.3** Ventricular tachycardia

**3.1.4.23.2.4** Ventricular bradycardia

**3.1.4.23.2.5** Extreme bradycardia

**3.1.4.23.2.6** Extreme tachycardia

**3.1.4.23.2.7** Pacer not captive

**3.1.4.23.2.8** Pacer not pacing

**3.1.4.23.2.9** Premature ventricular contraction (PVC)-min

**3.1.4.23.2.10** Low heart rate

**3.1.4.23.2.11** High heart rate

**3.1.4.23.2.12** Irregular heart rate

**3.1.4.23.2.13** Non-sustained V-Tach

**3.1.4.23.2.14** Ventricular rhythm

**3.1.4.23.2.15** Run PVCs

**3.1.4.23.2.16** Pair PVCs

**3.1.4.23.2.17** Multiformal PVCs

**3.1.4.23.2.18** R on T PVC

**3.1.4.23.2.19** Pause

**3.1.4.23.2.20** Missed beat

**3.1.4.23.2.21** Ventricular bigeminy

**3.1.4.23.2.22** Ventricular trigeminy

**NKA Response:** Yes, standard feature with NKA.

### **3.1.4.24 Patient Data Review:**

**3.1.4.24.1** Must have a minimum of ninety-six (96) hours of full disclosure waves, alarms, events, ST segments and trends that can be reviewed by selecting patient of interest and launching desired review application.

**NKA Response:** This is a standard feature with NKA and offers 120 hour full disclosure storage of 16 waveforms per patient, 120 hour graphical and tabular trending of all parameters, 256 hemodynamic calculation files per patient, 1,500 arrhythmia recall files per patient, 10,000 alarm event recall per patient and 120 hour 12 lead ST recall per patient.

**3.1.4.24.2** Must have strip function that provides detailed waveforms from wave event and alarm review applications and can be sent for patient's length of stay.

**NKA Response:** Yes, standard feature with NKA.

**3.1.4.25 Wave Review:**

- 3.1.4.25.1** Must have continuous full disclosure a minimum of four (4) configurable waves per patient.  
NKA Response: Yes, standard feature with NKA is 16 waveform full disclosure for 120 hours.
- 3.1.4.25.2** Must have one (1) – sixty (60) minute wave duration per screen.  
NKA Response: Yes, standard feature with NKA.
- 3.1.4.25.3** Must have timeline, tabulation, trend and event navigators for fast searches and greater context.  
NKA Response: Yes, standard feature with NKA.
- 3.1.4.25.4** Must have strip reports.  
NKA Response: Yes, standard feature with NKA.

**3.1.4.26 Alarm Review:**

- 3.1.4.26.1** Must have a minimum of (30) seconds (30s) compressed waveforms of alarm or saved strip events.  
NKA Response: Yes, standard feature with NKA.
- 3.1.4.26.2** Must have a minimum of four (4) waveforms per event.  
NKA Response: Yes, standard feature with NKA is up to sixteen (16) waveforms.
- 3.1.4.26.3** Must have simultaneous display of alarm events.  
NKA Response: Yes, standard feature with NKA.
- 3.1.4.26.4** Must have search by alarm severity.  
NKA Response: Yes, standard feature with NKA.
- 3.1.4.26.5** Must have interval measurement.  
NKA Response: Yes, standard feature with NKA.

**3.1.4.27 Event Review:**

- 3.1.4.27.1** Must have strip delayed for verification of event criteria.  
NKA Response: Yes, standard feature with NKA.

**3.1.4.28 Trend Review:**

- 3.1.4.28.1** Must have tabular display of physiological parameters.
- 3.1.4.28.2** Must have graphical presentation at a minimum of one (1) minute resolution using bivariate trend plots.
- 3.1.4.28.3** Must have exact parameters displayed for cursor time location.
- 3.1.4.28.4** Must have simultaneous display of trend plots.  
NKA Response: Yes, standard feature with NKA.

**3.1.4.29 Twelve (12) Lead Review:**

**3.1.4.29.1** Must have 2.5 to 10 second snippets.

**3.1.4.29.2** Must have 3 x 4, 6 x 2 and 12 x 1 (row by column) display and reports.

NKA Response: Yes, standard feature with NKA.

**3.1.4.30 Information Center:**

**3.1.4.30.1** Must include PC with the following standard components:

**3.1.4.30.1.1** Must have DVD/CD ROM disk drive/USB Port.

NKA Response: Not required. DVD/DCROM and disk drive are security risks. Only internal HDD is used.

**3.1.4.30.1.2** Must have audio cord and speaker.

NKA Response: Yes, standard feature with NKA.

**3.1.4.30.1.3** Must have keyboard.

NKA Response: Yes, standard feature with NKA.

**3.1.4.30.1.4** Must have mouse.

NKA Response: Yes, standard feature with NKA.

**3.1.4.30.1.5** Must have operating system software which is compatible with Windows XP or later (to insure compatibility with Agency's current operating system).

NKA Response: Yes, standard feature with NKA. Note: XP is no longer available from NKA nor supported by Microsoft.

**3.1.4.30.1.6** Software must have capability for monitoring a minimum of ten (10) patients.

NKA Response: Monitoring of up to sixteen (16) patients is available.

**3.1.4.30.1.7** Must have uninterruptible power supply (UPS).

NKA Response: Yes, standard feature with NKA.

**3.1.4.30.1.8** Must have external speakers.

NKA Response: Speakers are external from the PC.

**3.1.4.31 Waveform Display:**

**3.1.4.31.1** Screen resolution must a minimum of 1280 x 1024.

NKA Response: Yes, standard feature with NKA. 1920x1200 resolution.

**3.1.4.31.2** Vertical refresh rate must be a minimum of 60 Hz.

NKA Response: Yes, standard feature with NKA.

**3.1.4.31.3** Must have video-cable connector.

NKA Response: Yes, standard feature with NKA.

**3.1.4.32 Display Formats:**

**3.1.4.32.1** Must have single column: 4 x 1, 6 x 1, 8 x 1.

**3.1.4.32.2** Must have at least a 7.0 second wave trace at 24 mm/s.

**3.1.4.32.3** Must have a minimum 14.0 second wave trace at 12.5 mm/s.

**3.1.4.32.4** Must have ability of dual column 2 x 2, 3 x 2, 4 x 2, 5 x 2, 6 x 2, 8 x 2.

**3.1.4.32.5** Dual column must have a minimum 3.3 second wave trace at 25 mm/s.

**3.1.4.32.6** Dual column must have a minimum 6.6 second wave trace at 12.5 mm/s.

NKA Response: Yes, standard feature with NKA.

**3.1.5** Equipment must have a minimum one (1) year warranty.

NKA Response: NKA's standard Warranty is a five (5) year parts and depot labor for Bedside Monitors and Telemetry Transmitters and two (2) year parts and depot labor warranty for Central Stations.

**3.1.6** Must include manual/CDs for trouble shooting equipment problems.

NKA Response: NKA Response: NKA will provide two copies of the service manuals and operator's manuals for bedside monitors and central stations. CD's will also be included.

**3.1.7** Must include all installation labor and supplies.

NKA Response: Installation and labor are included in the proposal.

**3.1.8** Must provide on-site staff education for all of the nursing staff (approximately 100) for instruction for equipment use and care.

NKA Response: NKA provides free training for both the clinical and bio-medical support staff. NKA recognizes that training is essential to ensuring long-term satisfaction with your new patient monitoring system. We have designed our product training courses using a proven, blended learning approach. Our system implementation and customer support program consists of a four-step process:

1. Basic Product Training: Online training programs before, during and after installation.
2. Clinical Resource Development Program: Advanced training for unit-based clinical resource personnel.
3. Transitional Go-Live Support: Live clinical support provided by our RN clinical application specialists.
4. Ongoing Clinical Support: For no additional charge, clinical and technical support available 24 hours a day, 7 days a week.

***Basic Product Training (on your time, not ours)***

Many hospitals have adopted an e-learning approach to make comprehensive training programs more efficient, providing their staff with the utmost flexibility. NKA is proud to be the first patient monitoring company to offer basic product training through an e-learning experience prior to go-live. Our course format is based on adult

learning principles, including computer simulations derived from our actual monitors to allow for a unique, hands-on experience.

Programs are customized to meet users' individual needs and environment, and are available 24 hours a day. Courses are available before and after the installation of your new equipment, and are accredited for continuing education credit through the American Association of Critical Care Nurses (AACN). A certificate of completion may be printed at the end of each course.

***Clinical Resource Development Program - A true, value-added partnership***

Regardless of the amount or quality of training your staff receives prior to the live transition, every hospital needs ongoing training due to staff turnover and use of temporary personnel. As a result, NKA has initiated a Clinical Resource Development Program.

The quickest way to respond to operational questions is by having resources readily available on the unit. Therefore, we provide further advanced training to key staff members you appoint as unit-based clinical resource personnel. They will provide immediate answers to questions as they occur, and assist with ongoing product training for new staff members. Upon completion of the advanced training, they will continue learning through one-on-one instruction with a NKA clinical applications specialist.

***Transitional Go-Live Support***

NKA's clinical applications specialists are experienced registered nurses who provide live, clinical support during the transition phase. They will work with your staff to customize the equipment to meet your individual unit requirements and hospital protocol. Our clinical applications specialists will assist with the transition of your new monitoring system, reinforce basic user operations through real patient care situations, and continue advanced training with your clinical resource personnel.

***Ongoing Support***

In addition to the resources available in the online training courses, NKA's clinical and technical support teams are available through our customer support lines 24 hours a day, 7 days a week, 365 days a year. Ongoing support programs can be customized to meet your facility's specific needs.

***Management Tracking Tools***

A learning management system allows each user to self-register and logon to a course. A tracking mechanism also allows you to monitor compliance with online training assignments, and ensures that training occurs as required by JCAHO and other organizations. At any time, you will be able to create and print reports of your staff's training activities.

***Biomedical Personnel Training***

NKA also offers biomedical training to assist your staff in the initial setup and operations of our patient monitoring systems, as well as follow-up training for questions acquired from everyday operation. Our highly trained staff of customer service engineers is available 24 hours a day to answer your questions and concerns.



Immediately following system installation completion, NKA's customer service engineers will provide on-site training to your biomedical engineering staff and/or third party personnel. This on-site training will consist of the following:

- NKA product nomenclature, printed circuit board assembly and subassembly identification and location.
- Interpretation and usage of built-in system diagnostics.
- Use of the NKA Patient Monitoring System Troubleshooting Manual.

NKA's biomedical seminars are intended to familiarize attendees with a working knowledge of the current NKA product line for the purpose of equipment malfunction identification and correction. These seminars will be at the circuit board level, utilizing symptom analysis troubleshooting techniques. The following topics will be discussed for each product:

- Operational Description
- Block Diagram Explanations
- Self Check Program Explanations
- Symptom Analysis Troubleshooting
- Hands-on Troubleshooting

The service seminars are offered tuition free to the hospital while you own the equipment. Travel and lodging expenses will be the responsibility of the hospital.

#### **4. CONTRACT AWARD:**

**4.1 Contract Award:** The Contract is intended to provide Agencies with a purchase price for the Contract Items. The Contract shall be awarded to the Vendor that provides the Contract Items meeting the required specifications for the lowest overall total cost as shown on the Pricing Pages.

NKA Response: Acknowledged and agreed.

**4.2 Pricing Page:** Vendor should complete the Pricing Page by providing a Cost per Unit Price for the Commodity or Service Lines on the Request for Quotation, and then multiply the Cost per Unit Price by the Quantity provided in order to obtain a Total Cost. Add the column of Total Cost together to provide the Grand Total Cost. Vendor should complete the Pricing Page in full as failure to complete the Pricing Page in its entirety may result in Vendor's bid being disqualified.

Vendor should type or electronically enter the information into the Pricing Page to prevent errors in the evaluation.

NKA Response: Please refer to the completed Pricing Page attached in Appendix A.

- 5. PERFORMANCE:** Vendor and Agency shall agree upon a schedule for performance of Contract Services and Contract Services Deliverables, unless such a schedule is already included herein by Agency. In the event that this Contract is designated as an open-end contract, Vendor shall perform in accordance with the release orders that may be issued against this Contract.

NKA Response: Agreed.

- 6 PAYMENT: Payment:** Agency shall pay Unit Price for the Commodity or Service Lines as listed on the Request for Quotation, as shown on the Pricing Pages, for all Contract Services performed and accepted under this Contract. Vendor shall accept payment in accordance with the payment procedures of the State of West Virginia.

NKA Response: Agreed.

**7 DELIVERY AND RETURN:**

- 7.1 Shipment and Delivery:** Vendor shall ship the Contract Items immediately after being awarded this Contract and receiving a purchase order or notice to proceed. Vendor shall deliver the Contract Items within ninety (90) calendar days after receiving a purchase order or notice to proceed. Contract Items must be delivered to Agency at Welch Community Hospital, 454 McDowell Street, Welch, WV.

NKA Response: Agreed.

- 7.2 Late Delivery:** The Agency placing the order under this Contract must be notified in writing if the shipment of the Contract Items will be delayed for any reason. Any delay in delivery that could cause harm to an Agency will be grounds for cancellation of the Contract, and/or obtaining the Contract Items from a third party.

Any Agency seeking to obtain the Contract Items from a third party under this provision must first obtain approval of the Purchasing Division.

NKA Response: Agreed.

- 7.3 Delivery Payment/Risk of Loss:** Vendor shall deliver the Contract Items F.O.B. destination to the Agency's location.

NKA Response: Agreed.

- 7.4 Return of Unacceptable Items:** If the Agency deems the Contract Items to be unacceptable, the Contract Items shall be returned to Vendor at Vendor's expense and with no restocking charge. Vendor shall either make arrangements for the return within five (5) days of being notified that items are unacceptable, or permit the Agency to arrange for the return and reimburse Agency for delivery expenses. If the original packaging cannot be utilized for the return, Vendor will supply the Agency with appropriate return packaging upon request. All returns of unacceptable items shall be F.O.B. the Agency's location. The returned product shall either be replaced, or the Agency shall receive a full credit or refund for the purchase price, at the Agency's discretion.

NKA Response: Agreed.

**7.5 Return Due to Agency Error:** Items ordered in error by the Agency will be returned for credit within 30 days of receipt, F.O.B. Vendor's location. Vendor shall not charge a restocking fee if returned products are in a resalable condition. Items shall be deemed to be in a resalable condition if they are unused and in the original packaging. Any restocking fee for items not in a resalable condition shall be the lower of the Vendor's customary restocking fee or 5% of the total invoiced value of the returned items.

NKA Response: Agreed.

**8 TRAVEL:** Vendor shall be responsible for all mileage and travel costs, including travel time, associated with performance of this Contract. Any anticipated mileage or travel costs may be included in the flat fee or hourly rate listed on Vendor's bid, but such costs will not be paid by the Agency separately.

NKA Response: Agreed.

**9 FACILITIES ACCESS:** Performance of Contract Services may require access cards and/or keys to gain entrance to Agency's facilities. In the event that access cards and/or keys are required:

NKA Response: Agreed to all requirements in this Section 9.

**9.1** Vendor must identify principal service personnel which will be issued access cards and/or keys to perform service.

**9.2** Vendor will be responsible for controlling cards and keys and will pay replacement fee, if the cards or keys become lost or stolen.

**9.3** Vendor shall notify Agency immediately of any lost, stolen, or missing card or key.

**9.4** Anyone performing under this Contract will be subject to Agency's security protocol and procedures.

**9.5** Vendor shall inform all staff of Agency's security protocol and procedures.

**10 VENDOR DEFAULT:**

NKA Response: Agreed to all requirements in this Section 10.

**10.1** The following shall be considered a vendor default under this Contract.

**10.1.1** Failure to perform Contract Services in accordance with the requirements contained herein.

**10.1.2** Failure to comply with other specifications and requirements contained herein.

**10.1.3** Failure to comply with any laws, rules, and ordinances applicable to the Contract Services provided under this Contract.

**10.1.4** Failure to remedy deficient performance upon request.

**10.2** The following remedies shall be available to Agency upon default.

**10.2.1** Immediate cancellation of the Contract.

**10.2.2** Immediate cancellation of one or more release orders issued under this Contract.

**10.2.3** Any other remedies available in law or equity.

## 11 MISCELLANEOUS:

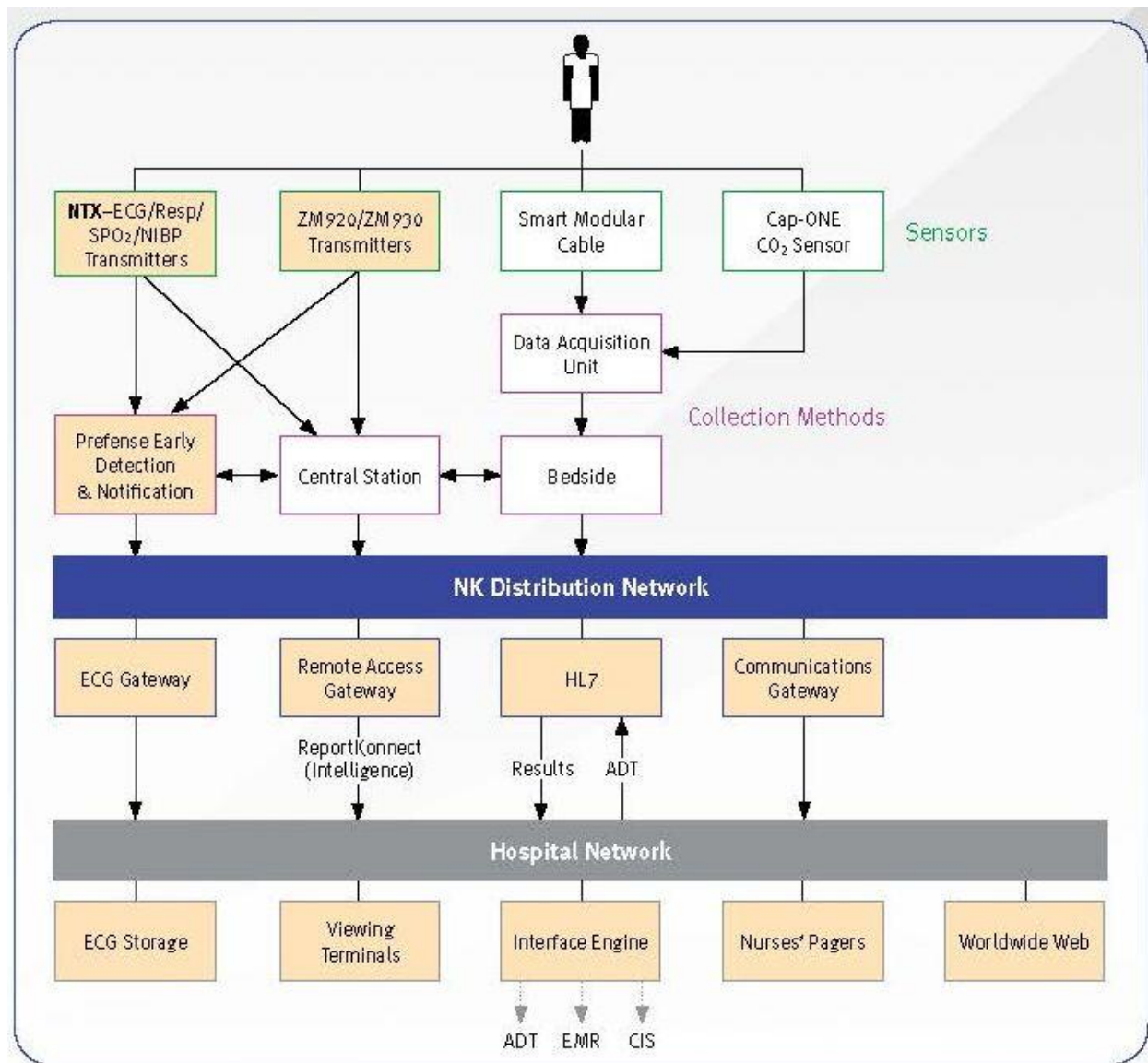
**11.1 Contract Manager:** During its performance of this Contract, Vendor must designate and maintain a primary contract manager responsible for overseeing Vendor's responsibilities under this Contract. The Contract manager must be available during normal business hours to address any customer service or other issues related to this Contract. Vendor should list its Contract manager and his or her contact information below.

**Contract Manager:** \_\_\_\_\_  
**Telephone Number:** \_\_\_\_\_  
**Fax Number:** \_\_\_\_\_  
**Email Address:** \_\_\_\_\_

NKA Response: Agreed. Upon award, NKA will designate a Project (Contract) Manager responsible for overseeing company's responsibilities under the contract.

### Nihon Kohden's Patient Monitoring Solutions

NKA's Enterprise Monitoring Solutions use extremely advanced, cost-effective technology that provides clinicians with the critical data they need when and where they need it. Empowering clinicians with information leads to quicker interventions and better quality outcomes. Further, NKA's Prefense Defensive Monitoring™ solution now also fills the void left by traditional monitoring companies, *allowing 24/7 monitoring for every patient across the enterprise.*



### Central Stations

Ideal for the critical care environment, telemetry, emergency room and other monitoring areas that require a comprehensive yet simple-to-use central monitoring station, the NKA Clinical Monitoring Information Station (CMIS), or central station, sets new standards in the time required to properly assess and document the condition of critical patients. All central station systems provide exceptional functionality, including 120-hour sixteen-waveform Full Disclosure, interpretive diagnostic 12-lead ECG review and management; 120 hours of both graphic and

tabular trends, comprehensive report generating capabilities and touch screens as standard features.

### ***Remote Network Stations***

The Remote Network Station (RNS) system provides for the flexibility to monitor patients in multiple locations with extended capabilities at a lower cost. The RNS provides for monitoring of up to 16 patients at a secondary location, with the same monitoring functionality as the CNS Central Station. Real time waveforms and numerics of up to 16 patients can be seen, with full review capability. The RNS system also allows patients to be Admitted, Discharged and Transferred from not only the Central Station where they are primarily monitored, but also at any RNS where they are displayed.

Quick and easy patient selection allows for rapid customization of which patients are displayed on the RNS screen. The number of patients on display is selectable by the user, with the easily accessed configuration screen allowing for displays to be configured to match the current patient census.

### ***Bedside and Transport Monitors***

Our **TR-6000 (BSM-6000) series** gets its name from the concept of Total Recall—it's the only line of fully featured bedside monitors that retains patient data consistently throughout the product line, even during transport. The system consists of a Data Acquisition Unit that uses our Smart Modular Cables and sensors, and three display options.

NKA's TR-6000 series transport monitor guarantees the maintenance of a high standard of monitoring care while a patient ambulates. Its Data Acquisition Unit (DAU) redefines transport monitoring due to the DAU's unique, compact design, memory expansion, and ability to move with the patient. The DAU features function keys for ease of use, and a long cord, allowing it to be placed on either side of the patient, for optimal clinical efficiency.

When a patient is transported between units, the DAU's additional memory enables arrhythmia recall, graphic and tabular trends, full disclosure, and all other pertinent information to stay with the patient during transport, and then be uploaded at the patient's final destination. This information can be seamlessly integrated into the hospital's clinical information system, leaving no gaps throughout the patient's stay.

As stated in the table on page 1 (Advanced capabilities as standard features), our bedside monitors include these valuable software features at no additional charge: full disclosure, comprehensive arrhythmia analysis and recall, diagnostic 12-lead ECG, 12-lead ST segment analysis and recall, drug calculations, hemodynamic calculations, and pulmonary calculations, and many others.

Despite 30% more standard functionality, our monitors typically cost 30% less than our competition—offering unprecedented value that promotes improvement in quality.

### **BSM-1700 Transport Monitor**

The BSM-1700 monitor is the most advanced transport solution available. The transport monitor guarantees the maintenance of a high standard of monitoring care while a patient ambulates. It redefines transport monitoring due its unique, compact design, memory expansion, and ability to move with the patient.



When a patient is transported between units, the monitor's memory enables arrhythmia recall, graphic and tabular trends, full disclosure, and all other pertinent information to stay with the patient during transport, and then be uploaded at the patient's final destination. This

information can be seamlessly integrated into the hospital's clinical information system, leaving no gaps throughout the patient's stay.

As stated in the table above, our patient transport monitors include these valuable software features at no additional charge: full disclosure, comprehensive arrhythmia analysis and recall, diagnostic 12-lead ECG, 12-lead ST segment analysis and recall, drug calculations, hemodynamic calculations, and pulmonary calculations, and many others.

The BSM-1700 provides three multi-connectors and is available in either Masimo or Nellcor SpO2 technology. A Docking Station provides for AC power, battery charging and network communications for network laser printing and interbed.



### ***NTX Ambulatory Transmitters***

Lightweight and energy efficient, NKA's telemetry transmitters are ideal for patients that require ambulatory monitoring in the traditional step-down telemetry units and med-surg floors. Ergonomically designed to provide patient comfort and mobility, our NTX transmitters bridge the gap between a traditional bedside monitor and an ambulatory transmitter. The NTX allows hospitals to safely monitor higher-acuity patients while maintaining the flexibility, comfort and mobility associated with the ambulatory patient. It allows for monitoring of up to eight leads of ECG, respiration, continuous SpO2 and NIBP at the Central Monitor. Integrated 2.2" color screen displays continuous real-time waveform and vital signs, and provides data review with 10 minutes of full disclosure waveforms and 10 minutes of vital signs data, vital trends, full disclosure, lead status and battery status. The NTX transmitter operates in the protected WMTS frequency band and provides economical operation through the use of three alkaline "AA" batteries.

### **ZM-530PA and ZM-520PA Transmitters**

The **ZM-530PA** allows monitoring of up to eight vectors of ECG, SpO2 and respiration at the Central Monitor. Its integrated 2.2" color screen displays continuous real-time waveform and vital signs, and provides data review with 10 minutes of full disclosure waveforms and 10 minutes of vital sign data. The display also indicates lead status, battery status and pulse strength. The transmitter operates in the protected WMTS frequency band and provides economical operation through the use of two alkaline "AA" batteries. Its sister product, the **ZM-520PA** possesses the exact same functionality and benefits, except SpO2 monitoring.

Backed by a five year warranty, our transmitters provide superior performance, a full feature set and incomparable price to performance ratio.

### **Prefense**

NKA has a history of successfully serving the needs of private and government-run hospitals, supplying products with extensive functionality, ease of use, reliability, an average 30% lower price tag than our competitors; and standard five-year parts and labor warranties. We know your operational and financial hurdles. We've used that knowledge to analyze and expand the capabilities of existing vital signs monitors, creating a product that satisfies all traditional monitoring requirements, significantly increases the quality of patient care, and still costs less than all other market offerings: Prefense.

As a continuous monitoring solution, Prefense allows hospital personnel to catch adverse trends and events earlier and respond faster, giving you every opportunity to save patients' lives.

Prefense consists of:

- The NTX ZM-540PA transmitter; the world's first ergonomically designed, wireless telemetry transmitter that allows freedom to ambulate while monitoring heart rate, SpO2, respiration rate, apnea, and NIBP
- A low acuity detection system interface, the Prefense main unit, with LCD display
- Pagers for nurses and other care givers in need of notification

The Prefense system allows 'on demand' viewing of all collected data over time as graphical and tabular trends, revealing signs of patient deterioration hours earlier than periodic vitals assessments every two, four, or six hours. Prefense data is also easily integrated into a hospital's Electronic Health Record (EHR) through a seamless HL7 interface.

The system's initialization of clinical responses and interventions has been shown to:

- Reduce patients' length of stay by 17%
- Reduce re-admissions by 30%
- Reduce unplanned transfers to ICU by 85%



Our Prefense system offers exceptional functionality, including:

- **Non-Invasive Blood Pressure:** The NIBP is Oscillometric, with a measurement range of 0 – 300 mmHg. Inflation Pressure is a maximum of 300mmHG, and our system works with all standard cuffs. Also, the automatic cycle mode can be set to 5, 10, 15, 30, 60, 120 or 240 minute intervals, and there is a manual measurement override.
- **Pulse Oximetry:** The device has pulse oximetry measurement functionality, with a range of 0 – 100% for SpO2. The display is continuously updated.
- **Measurement Time and Automatic Zero:** The NTX monitor continuously collects and transmits vital signs, there is NO time required for measurement. Also, since the monitor is continuously collecting the vital sign data from the patient, there is no return to zero required.
- **Measurement Intervals:** One button press selects the interval for blood pressure. All other vitals are monitored continuously to ensure patient safety.
- **Measured Parameter Alarms:** Measured parameters have the capability to be utilized as alarm parameters. There are audible and visual alarms on the Prefense base station, and the audible alarm may be silenced. There is also a 72-hour record of all alarms. The system utilizes an FDA-approved smoothing algorithm that reduces nuisance alarms by 90%. It mitigates non-relevant alarms, while catching trend changes.

### ***Anesthesia Monitoring—The GF-210RA Multi-Gas Unit***

The GF-210RA Multi-Gas Unit, connected to our proposed bedside monitors, provides a complete anesthesia monitoring solution. The unit delivers quick and accurate measurement of anesthesia gases including CO<sub>2</sub>, N<sub>2</sub>O, O<sub>2</sub>, up to two anesthetic agents (automatically selected from Halothane, Isoflurane, Enflurane, Sevoflurane, Desflurane) and respiration rate. The unit is for adult and neonatal anesthesia monitoring, and incorporates user-friendly touch screen operation.

Quick access windows display five waveforms (O<sub>2</sub>, CO<sub>2</sub>, N<sub>2</sub>O and two agents) with easy-to-view numerical data color-coded to match each waveform; comprehensive graphic trends of all parameters; a tabular data list that gives you minute-by-minute values of all anesthetic agents, gases and vital signs; and a user-selectable alarm for all parameters.

### ***CapONE Mainstream etCO<sub>2</sub> Sensor***

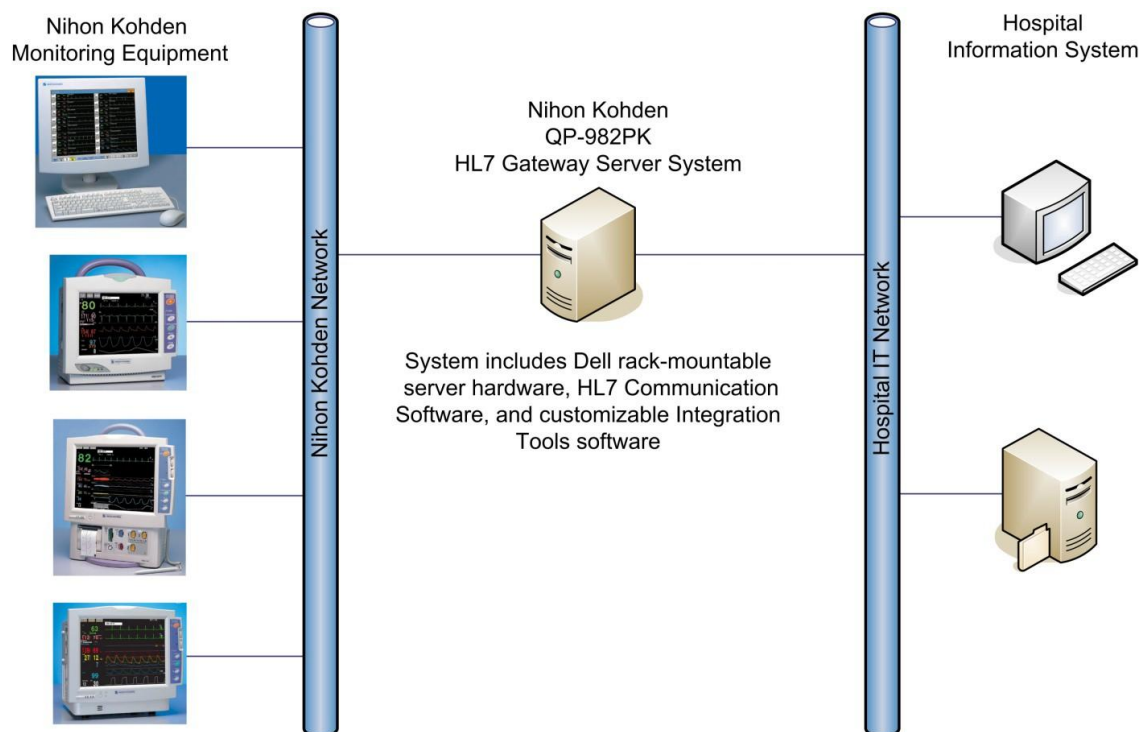
All NKA bedside monitors have CO<sub>2</sub> capture capability. NKA provides an exclusive etCO<sub>2</sub> sensor that can be used with intubated or non-intubated patients. Using advanced miniaturization and sensor technology, NKA has substantially reduced the size of our traditional mainstream sensor. This new sensor is attached to a disposable oral and nasal adaptor and placed directly at the point of expiration. NKA clients can achieve the same level of quality and reliability found in traditional mainstream CO<sub>2</sub> monitoring, and apply these benefits to both non-intubated and intubated patients without any of the hassle and cross-contamination concerns found in traditional sidestream technology. The CapONE system allows for safe, accurate capnography monitoring, and even quick-start CO<sub>2</sub> measurement.

### ***HL7 Gateway***

NKA's HL7 Gateway Interface includes software and hardware to facilitate the transfer of ADT and results messages between the NKA monitoring system (NKMS) and a Hospital Information System (HIS). Patient admission, discharge and transfer data will be transmitted from the Hospital Information System to the NKMS and vital signs (results) will be transmitted from the NKMS to the HI System.

The Gateway Interface has been designed to communicate using industry standard HL7 2.3 ADT, ORU, and ORF messages; however, using NKA's flexible Integration Tools software, it is possible to modify either interface to accommodate site-specific requirements.

**The following HL7 illustration is for demonstration of a typical connection.**



### ***ADT Communications***

When the attending care-provider enters a patient ID on a NKA bedside monitor or central station, a request for patient demographic information is sent to the HL7 Gateway. The NKA HL7 Gateway can use two possible methods for transmitting ADT information to the patient monitoring network:

- a. ADT messages flow to the NK Gateway from the HIS in an unsolicited manner and are stored in the Gateway's internal database. The patient monitors query the internal database for available demographic data.
- b. A patient Query (A19) can be passed to the HIS (or other HL7 compliant system) from the patient monitor via the NK Gateway. The Host system will return an ADR message result to the patient monitor via the Gateway.

Using either method, once a valid patient ID is entered into the bedside or central monitor, the patient demographic fields on the monitor will automatically be filled in with the patient's name, height, weight, sex and date of birth. (Age and body surface area will automatically be calculated by the monitor using this data.)

If an invalid patient ID number is entered, a null reply will be sent to the bedside monitor and these fields will be blank to indicate the invalid ID number.

#### *Vital Signs Results Communications*

Once a Patient ID number has been entered into either the bedside monitor or central station, vital signs results data transmission will be activated. Two methods are available for transmitting vital sign results data from the patient monitoring network to the HIS (or other HL7 compliant system):

- a. **Unsolicited Results messages (ORU)** Results messages containing vital signs and associated numerical and text information can flow from the patient monitors (via the NK Gateway) to a HL7 compliant system on pre-selected time intervals. (A single ORU time interval is programmed in the HL7 Gateway for all connected beds. Available intervals are 6 and 30 seconds, and 1, 5, 10, 30 and 60 minutes.)
- b. **Query and Response (QRY-ORF)** Customer's HL7 compliant system will query (QRY) for results and receive an Observation result message (ORF) containing the latest results for that patient.

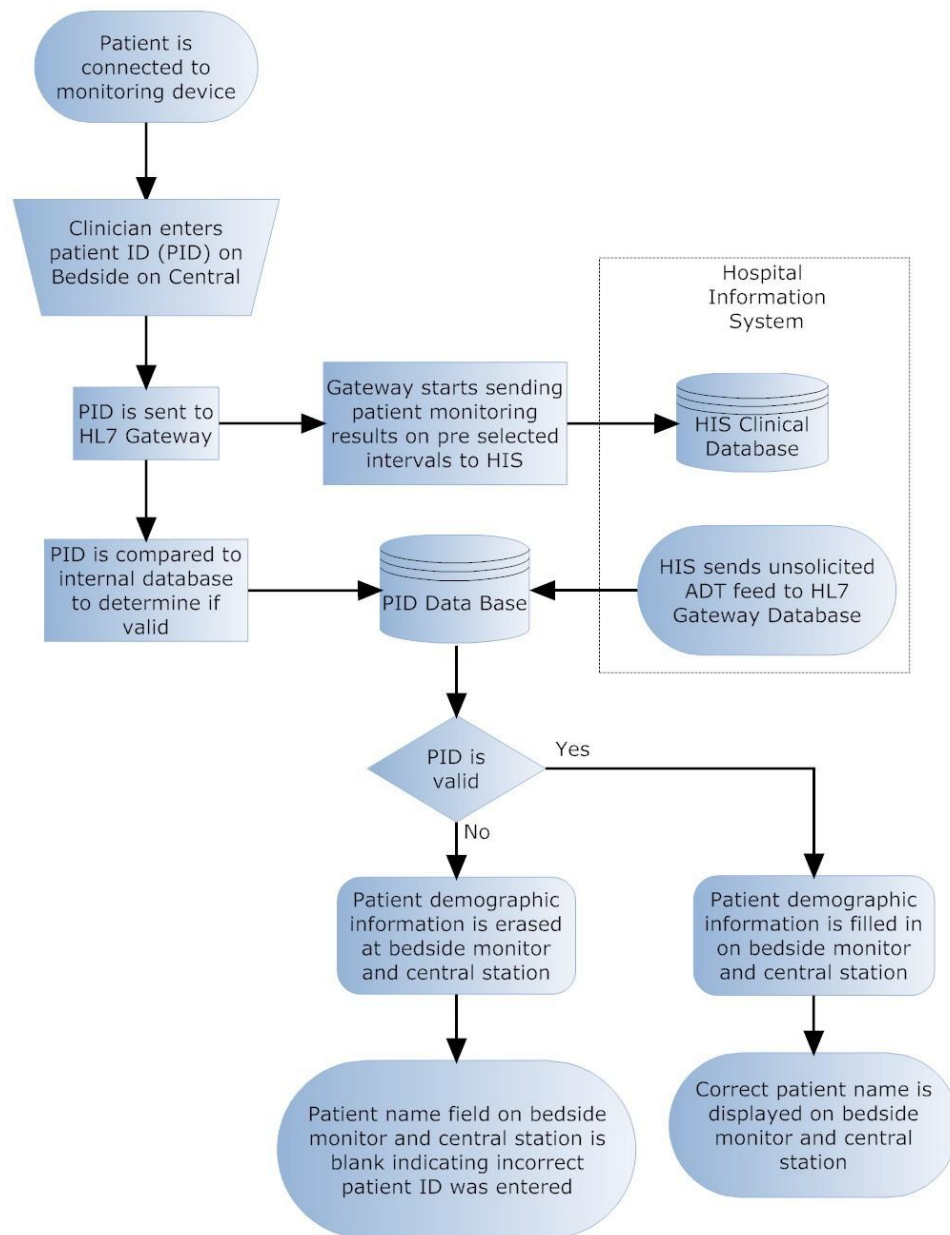
All communications are between the customer's HIS/HL7 compliant system and the NK HL7 Gateway via TCP/IP sockets connectivity.

#### *System Configuration*

A single NKA HL7 Gateway server is capable of handling communications from up to 300 NKA patient monitoring devices. Each Gateway server is provided with two network interface cards (NIC). One NIC is for connection directly to the NKA patient monitoring system network and the second NIC is for connection to the hospital IT network for communications to the Hospital Information System.

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### Sample Process Flow for Unsolicited ADT Feed and Unsolicited Results System



#### **Data Transfer**

NKA supports an “admit once, discharge once” model with no loss of data during transport or transfer between care units. Transfer of data between care units, or between any networked equipment is a seamless process. Utilizing our proposed central stations, caregivers can transfer patients monitored on bedside monitors or telemetry transmitters digitally between care units with no loss of data. All patient data is carried forward, including full disclosure, arrhythmia events, ST analysis, 12-lead diagnosis. Alternatively, patient transfer can be accomplished utilizing input boxes that fit into the back of our bedside and transport monitors – with full disclosure patient data being stored during transport and backfilled into the patient record when the patient arrives at the destination department.

Specifically, NKA can transport patient data in two ways: through the DAU, moving from one bedside monitor to another; as well as via electronic data transfer between care units. This can be initiated from any central nursing station or interactive remote station, and done from one care unit to another, with no loss of patient data. Understanding that transfer refers to patients being physically moved from one department to another (i.e. ED to ICU and/or Telemetry, to several floors away for CT and/or MRI, special procedures, catheterization, etc., and final discharge), NKA provides the most complete “uninterrupted” record and trends for the complete patient stay.

Example: A patient leaving the ED is connected to the NK transport monitor, which uses the same cable connectors as the bedside monitor in the ED. Upon departure of the patient from the ED, the patient’s data can be transferred from the ED Central Nursing Station to the ICU, Telemetry, or any other destination’s central station monitor. This allows for continuous monitoring of the patient during transport, on a central station monitor, and a continuous data record on that patient from the time the patient is presented in the ED, to when the patient is hooked up to the NKA ICU, Telemetry, or any other NK monitor that is connected to the network.

### ***Bed-to-Bed Communication***

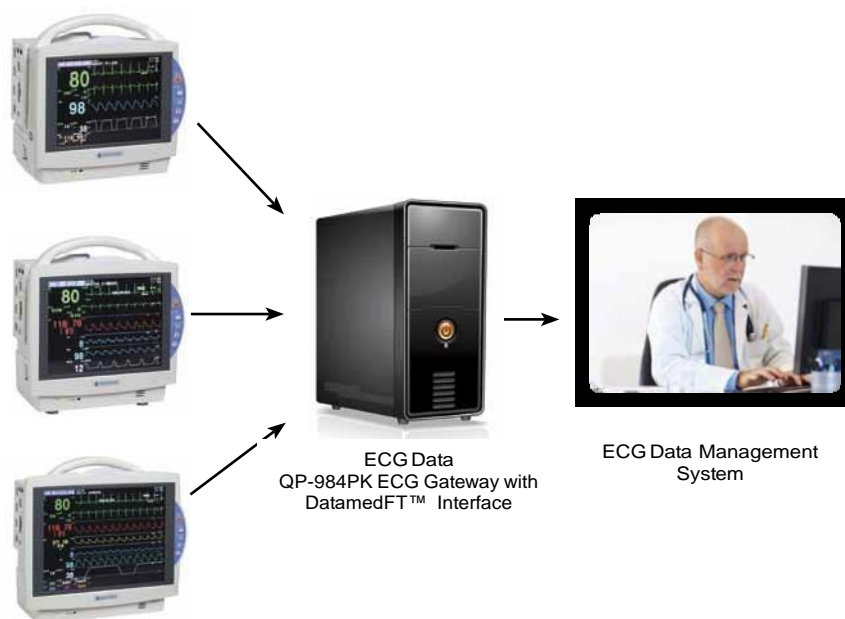
All networked NKA bedside monitors can provide bed-to-bed (“interbed”) communication, allowing viewing and interaction from any other networked monitor. Up to 16 beds can be viewed from one bedside, including vital signs, waveforms, and alarm notifications.

### ***12-Lead EKG Interface***

NKA’s QP-984PK ECG Gateway Interface captures interpretive 12 lead ECGs performed on BSM-4100, BSM-5000, BSM-6000 and BSM-9000 series bedside monitors and forwards these ECGs using NKA’s ECG format. These formatted ECGs can be directly imported into Quinton’s Pyramis system for storage.

For customers using EKG Data Management systems other than Pyramis, the DatamedFT™ EKG Format Translator can translate the NKA 12 lead ECG into one of over twenty different EKG formats to allow for storage on most hospital data management systems. The EKG waveform data along with header data, patient demographics, measurements, and interpretive statements are translated into the host system’s native format and transferred to the host system. Translated EKGs are seen and handled by the host system as if they had originated on their own proprietary devices, and may be stored, recalled, edited, and printed just as any other EKGs in the host system.

**DatamedFT™** is a specialized software application that is installed on a standalone PC and connected to the destination system via the hospital network. **DatamedFT™** is an IT/IS application that is user-installed and user-supported with Engineering Solution’s assistance via email and/or telephone. Once installed, **DatamedFT™** is a completely transparent interface in normal use, and will run on Windows XP Professional SP2 & SP3, Windows Vista, Windows 2003 Server, and Windows 2008 Server.



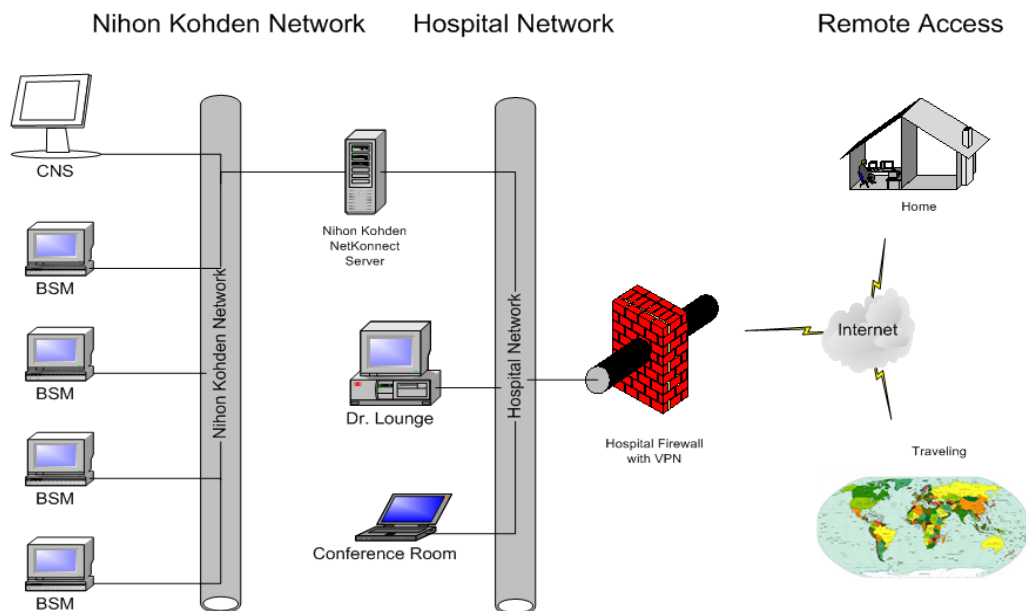
Customers will purchase **DatamedFT™** directly from Engineering Solutions who can be reached at (800) 601-3361 or through their web site at [www.engs.com](http://www.engs.com). Current **DatamedFT™** pricing can be found at <http://www.datamed.com/pricecal.html>. Pricing is subject to change without notice.

### ***Remote Communications*** **NetKONNECT**

NetKonnnect is the most advanced remote data access system NKA, or any other manufacturer has offered to clinicians for accessing patient information. It provides for remote access of a patient's current waveforms and vital signs, and stored data such as full disclosure, arrhythmia recall, ST level history, trend data, hemodynamics data and 12 lead ECG interpretations. Connection options include direct access from within the medical facility using any PC connected to the hospital's existing intranet or remote access from any PC using either dial-up or high speed internet connection. The gateway PC for NetKonnnect maintains a database of all authorized users and provides the system administrator the ability to assign access right for each user to insure full HIPAA compliance. Access rights can be assigned to each user based upon the patient's attending physician's name, attending physician's group, or the patient's location such as ICU or CCU. The gateway PC can also be configured with virus protection software to prevent a virus from compromising the integrity of the monitoring or hospital network.

The NetKonnnect system includes a gateway PC and all required software to allow up to 1000 users to be registered for data access. Individual users can be assigned access rights and all up to 255 users can simultaneously access patient information from the NK monitoring network.





The gateway PC will typically be located in the IT department along with the other servers used in the hospital. The hospital will be responsible for maintaining the NetConnect gateway PC including virus protection, operating system patches, and user ID and password maintenance.

### *NetConnect Advantages*

#### *Nursing*

- Improved patient outcomes. Providing physicians with timely access to patient data permits rapid response and treatment as a patient's condition changes.
- Time savings. NetConnect reduces the time staff spends communicating changing patient conditions to physicians and copying and faxing patient records.

#### *Physicians*

- Anytime, anywhere access to patient data. Physicians can access their patients' current and stored monitoring data at any time, anywhere, as it's convenient for them. No longer do they have to rely on having someone at the hospital verbally relay or fax them critical information regarding a patient's condition.
- Improved patient outcomes. Providing physicians with timely access to patient data permits rapid response and treatment as a patient's condition changes.

#### *Administration*

- Gain physician loyalty and attract quality physicians. The advanced features of NetConnect can help to attract and retain the quality physicians every hospital desires.
- Improved patient outcomes. Providing physicians with timely access to patient data permits rapid response and treatment as a patient's condition changes.
- Decreased operating costs. NetConnect reduces the time staff spends communicating changing patient conditions to physicians and copying and faxing patient records. Better patient outcomes reduce per patient care expense.

- Protect patient privacy. HIPAA compliant access control insures only authorized personnel have access to patient data. Gone are the days of sending a fax and hoping the correct person receives the information.

### ***ReportKonnnect***

ReportKonnnect is an additional capability and an option to NKA's remote data access system, NetKonnnect. NKA offers a quality assurance application, ReportKonnnect, which provides an accurate method to measure the true quality of monitoring care provided with the NKA patient monitoring system. This application can be used to generate reports both by department, and by specific beds, that provide quality of monitoring measurements such as leads off and alarm occurrences, and time to respond to alarms, enabling hospitals to benchmark several key factors affecting patient monitoring quality and to display and print reports on a hospital-wide, department-by-department, or bed-by-bed basis. ReportKonnnect data help you assess your patient monitoring practices and guide acceptance of evidence-based protocols—thereby reducing sentinel events and improving patient outcomes. When this application is purchased and installed on the NetKonnnect server, key personnel can be assigned access rights to the monitoring quality reporting capability of ReportKonnnect.

### **ViTrac**

ViTrac allows for the remote accessing of patient data using Apple iPad, iPhone and iPod Touch products. The ViTrac system will allow the hospital to assign access rights to clinicians who will be able to remotely access the monitoring data. ViTrac is similar to our NetKonnnect product in that it allows users to view current waveforms and vital signs, and review stored data, including graphical and tabular trends, arrhythmia recall events, ST segment history, full disclosure waveforms and hemodynamic calculations.

A new feature of ViTrac is the ability to view up to 12 patients at one time on an iPad, or eight patients (by scrolling) on an iPhone or iPod Touch. Data can be accessed wirelessly from within the hospital or remotely, using hospital provided connection methods.

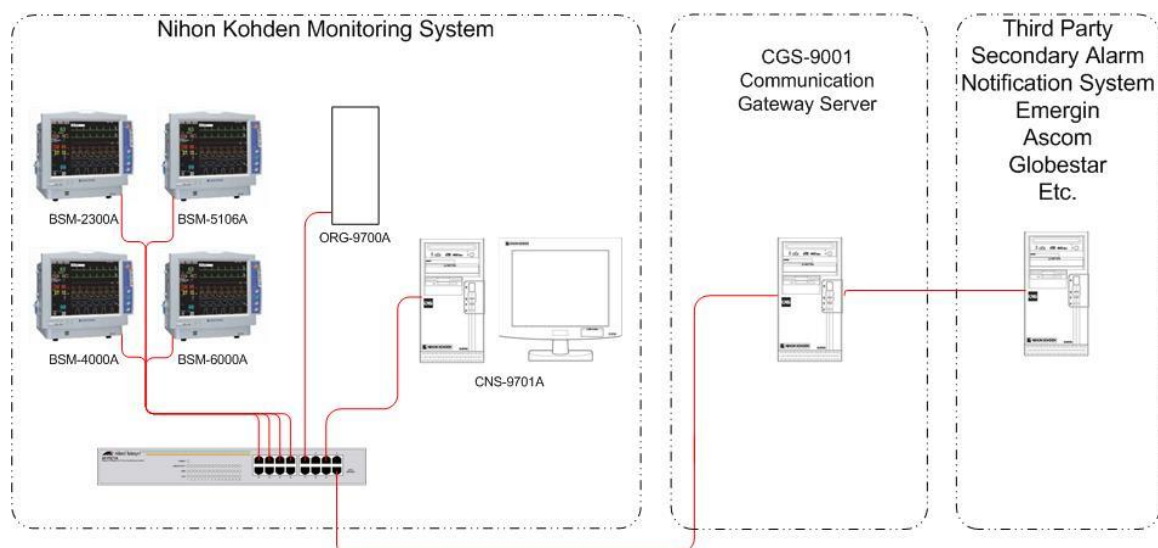
The ViTrac system includes server hardware and ViTrac server software with the ability to register a specific number of users. To clarify, on a 25 user system the hospital can register 25 users who will then be able to access data remotely. The client software for the Apple user devices is available as a free download from the Apple App store.

### **CGS-9001 Communication Gateway Server**

The CGS-9001 Communication Gateway Server is a server based application that captures alarm events from the NKA monitoring system and forwards them to a third party alarm notification controller system. Currently NKA has completed interfaces to the following third party alarm notification controller systems; Emergin, Ascom and Globestar (Connexall). NKA has an open communication protocol and is willing to work with other vendors based upon hospital requirements. The third party alarm notification controller system is required to properly direct the alarms from the NKA system to the appropriate mobile devices carried by nurses and to provide for alarm escalation if the initially paged nurse does not respond.

Alarm information sent includes patient name, patient ID, room number/name, alarm violation type, vital signs at the time of the alarm, and a waveform image if the event was an arrhythmia alarm.





## Service

NKA supplies telephone support 24 hours a day, seven days a week, 365 days a year. It's staffed with experienced service personnel that resolve 80% of all questions immediately. The service level scales up or down seamlessly with the volume and complexity of calls.

Further, NKA works with the hospital biomedical engineers by phone, to assist with hands-on troubleshooting. In the event of a prolonged issue, our service technicians will arrive on site within 24 hours. All support services are provided free of charge during the five-year warranty period, with exception of problems initiated by the client or equipment abuse. Also, remote diagnosis is available for all of our server products (HL7, NetKconnect, ECG) via Virtual Private Network (VPN).

NKA also provides an up-time service model based on depot repair. To eliminate downtime waiting for a service technician, NKA supplies no cost consignment monitors and telemetry for immediate use on site in the event that there are any issues with the equipment. This guarantees 99% uptime. While the consignment unit is in use, equipment can be sent back to NKA for any necessary repairs, and will typically be returned in 2-3 days. There is virtually no downtime for repairs.

NKA's volume of business and customers has grown 10% to 15% each year for the past three years, and our service ratings have remained unchanged at Number One in the industry, proving our ability to provide quality products and customer satisfaction.

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## Warranty

NKA provides the best warranties in the industry. **We cover our bedside monitors, telemetry transmitters and telemetry receivers with a five-year parts and depot repair labor warranty, and our central stations with a two-year parts and labor warranty.**

Should a device fail during the warranty period, NKA will provide a loaner monitor by overnight delivery (**Note: On-site loaner equipment will be provided under special agreement.**) After placing the loaner monitor into service, the defective unit is returned to NKA for repair and will be returned to the hospital. The loaner monitor is then returned to NKA.

### **Additional Value Added Services**

NKA offers the lowest total cost of ownership and the greatest value of any enterprise monitoring solution. Our products are full-featured and there are no hidden costs for additional (and often expensive) software options. We are the only company in the industry that backs our Enterprise Monitoring Solutions with a five-year warranty. Since there are no additional licensing fees or hidden costs, there is no additional impact on your operational budget. And we support our products by offering complimentary software upgrades and technical support for the life of your system—benefiting your operational budget year over year.

NKA's business model focuses on predicting costs over the short and long term. The **free five-year warranty on bedside monitors, free software updates and enhancements over the life of the equipment, and free nursing and biomedical engineering training** help you predict costs over the term of the partnership. Also, NKA provides full installation services, including cable, switching, wall plates, terminations, except the physical pulling of cable from point A to point B, going above and beyond our competitors.

### *Product Breadth*

Typically, bedside monitors contain feature sets that are associated with display size—larger monitors cost more and have more features. Software options can be purchased to add valuable features that increase the overall costs. In contrast, all of NKA's TR-6000 Series monitors include these valuable software features at no additional charge: full disclosure, comprehensive arrhythmia analysis and recall, diagnostic 12-lead ECG, 12-lead ST segment analysis and recall, drug calculations, hemodynamic calculations, and pulmonary calculations, just to mention a few.

Our philosophy is simple: A standardized user-friendly interface should be used to access any and all software features for all acuity levels and patient types. The customer simply selects the best setup for their patient care scenario. Multi-parameter modules store patient data and can be moved between monitors. Patient data can also be transferred across the network.

### *NKA Technology*

NKA has a great legacy of not only keeping our technology current with the latest clinical algorithms, but also providing software updates free for the life of the equipment. This allows our customers to take advantage of technological advancements without experiencing major equipment costs and the “forklift” upgrades that are so typical in the industry. NKA is the only monitoring company that has developed a “smoothing algorithm” that helps deal with “alarm fatigue”, a common problem when monitoring patients in less acute settings.

We also believe in keeping a common user interface across all our monitors so you learn NKA ONCE. Screen size can be chosen based upon applicable environment, and all sizes have a numbers mode that will minimize waveforms and enable even larger numbers for applicable environments.

#### *Web Access and Utilization*

NKA works to push patient information to the caregiver to ensure greatest quality of care and earliest intervention. We have capabilities to view patient data internally and remotely on a PC with our NetKonnnect remote data access system. This provides clinicians the ability to view current waveforms and vital signs, and review stored data, including graphical and tabular trends, arrhythmia recall events, ST segment history, full disclosure waveforms and hemodynamic calculations. Data can be accessed within the hospital using a hospital network connection or from a remote location using the Internet.

#### *User Friendly and Intuitive Controls*

NKA monitoring solutions allow for the ability to utilize monitoring equipment across various departments with consistent processes allowing for clinical confidence in results. All NKA monitors have the same capabilities and software functionality regardless of the cost or size. All monitors have the same standard user interface that looks and acts the same from our smallest monitor to our largest monitor. Our TR-6000 Series of bedside monitors are designed for clinical ease of use. With one or two touches, you gain access to the most important information that enable staff to make a quicker assessment to treat and intervene appropriately, depending on your patient's condition. In addition, our Smart Modular Cable technology miniaturizes circuits found in traditional modules and embeds that circuitry into the cable. With Smart Cable technology, you'll get complete modular flexibility at a significantly reduced cost and without all of the inconvenience associated with traditional modular systems, i.e. searching for the right module to accomplish the right parameter at the right time. Smart Cables give you the flexibility to achieve any parameter when you need it.

#### *Alarm Management*

NKA also allows an Alarm Master to be set for ease of standard alarm settings. Individual alarms can be set after the Alarm Master as well. Flexible programming allows the caregiver to set alarms based upon the needs of the patient.

#### *Explanation of Software Updates*

NKA patient monitors are covered by a Lifetime Software Update Program, under which all routine software updates are provided to our customers at no cost.

Note: Some software updates may contain feature enhancements that will require additional accessories and/or cables to operate. If the hospital would like to use the enhanced features, it is incumbent upon the hospital to purchase the additional accessories and/or cables in order to use the feature enhancements.

#### *Software Licensing*

NKA monitoring products contain proprietary software that is incorporated and/or embedded into the design of the product. Purchase of NKA monitoring equipment grants the buyer a right to use the software with no additional payments required other than the original purchase price of the equipment. Software updates are provided free of charge for the life of the equipment. This does not apply to third party items not manufactured by NKA.

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Thank you for the opportunity to introduce you to our quality patient monitoring solution.

**Appendix A: State of WV - Pricing Page and Nihon Kohden's Detailed Quote**

## Pricing Page

**CRFQ 0506 WEH1700000007**

### Telemetry

Description/Equipment/One Time Purchase	UNSPSC	Unit of Measure	Quantity	Cost Per Unit	Total Cost
3.1.1 Bedside monitors	42181719	Each	15	\$3,120.00	\$46,800.00
3.1.2 Medical surgical wearable patient monitors	42181719	Each	10	\$1,680.00	\$16,800.00
3.1.3 Information center 2 CNS \$70,051.20 1 RNS \$ 5,880.00	42181719	Each	3*	*Refer to breakout	\$75,931.20
3.1.4 Warranty	42181719	Each	1	No charge	No charge
3.1.5 Manual/CDs	55101521	Each	1	No charge	No charge
3.1.6 Installation	81111809	Each	1	\$11,600.00	\$11,600.00
3.1.7 In-service medical staff	86000000	Each	1	No charge	No charge
Other charges include: Laser Printer, WLAN Coverage, Hardware, ECG Lead wire sets *See NKA's Detailed Quote attached.					\$44,764.88 does not include antenna charge
<b>Grand Total Cost</b>					<b>\$195,896.08</b>

**Evaluation and Award Criteria:** Contract will be awarded to the Vendor meeting the required specifications for the lowest overall Grand Total Cost.

Nihon Kohden America, Inc. \_\_\_\_\_

**Vendor Name (Printed)**

\_\_\_\_\_  
**Purchase Order Address**

6017 Solution Center, Lockbox #776017, Chicago, IL 60677

**Vendor Remit-To Address:**

Michael Ohsawa, VP of Finance \_\_\_\_\_

**Vendor Authorized Representative (Printed)**

\_\_\_\_\_  
**Signature**

\_\_\_\_\_  
**Date**

(949) 580-1555 \_\_\_\_\_

**Telephone**

(949) 580-1550 \_\_\_\_\_

**Fax**

\_\_\_\_\_  
**E-mail**



15353 Barranca Pkwy Irvine, CA 92618  
Phone: (949) 580-1555 / (800) 325-0283, Fax (949) 580-1550

Quotation Date: 12/29/16  
Quotation #: 01220280  
Valid for: 60 days

**Bill To:**

Welch Community Hospital  
454 McDowell St  
Welch, WV 24801

Prepared By: Juan Pineda  
Salesperson: Joe Shehab  
Terms: 80% due upon delivery, 20% Net 30.  
Warranty: Capital Equipment as Stated  
FOB: Irvine  
Ship: Approx. 90 Days ARO

Contract: NKA 2015 @ 20%  
Discounts: Equipment Discount 20%. Supply Discount 12%; Freight:  
FOB Hospital on Equipment orders; Payment Terms: 80% Upon  
Delivery, 20% Net 30

Monitoring Pricing Summary	
Department	Total
Bedside monitors and Telemetry	195,896.08
Total:	195,896.08

**Note:** At this time no WMTS coverage area has been quoted. If additional WMTS coverage is required, marked CAD drawings will be needed for accurate coverage and pricing information. Customer will be responsible for the cost of any additional coverage needed. If no existing WMTS coverage is in place; this configuration is not valid until the required coverage area is quoted.

QTY	MODEL		DESCRIPTION	LIST PRICE	EXT. PRICE	EXT. TOTAL
			<b>Bedside monitors and Telemetry</b>			
2	CNS-6201-16-S	E	16 Patient color central monitoring system for WMTS telemetry and hardwired monitoring. Provides flexibility to monitor up to sixteen hardwired or telemetry patients. Full disclosure provides 120 hour storage of up to 16 waveforms per patient and arrhythmia recall of 1,500 events per bed. Alarm events are color tagged in full disclosure for easy identification. Network feature allows multiple central stations to be connected for patient data transfer, remote patient monitoring and patient overview monitoring. Patient archiving feature allows for the review or re-admission of patient data of the last 300 discharged patients within the last 120 hours. Includes 24" touch screen flat panel LCD displays, 2 channel thermal recorder, uninterruptible power supply, mouse, and keyboard. Features include data storage per patient of 1,500 arrhythmia recall files, 120 hours ST segment recall and trends, 256 hemodynamic calculation trends and tables, 10,000 event and alarm history, and 120 hour graphical and tabular trends with 1 minute resolution. Manual or automatic reports may be printed on optional laser printer. Covered by a 2 year depot repair parts and labor warranty.	43,782.00	35,025.60	70,051.20
1	ORG-9100A-4	E	4 Patient WMTS digital telemetry receiver; complies with new FDA and FCC guidelines for medical telemetry. Covered by a five year depot parts and labor warranty. 608 UHF MHz	9,922.00	7,937.60	7,937.60
1	ORG-9100A-6	E	6 Patient WMTS digital telemetry receiver; Complies with new FDA and FCC guidelines for medical telemetry. Covered by a five year depot parts and labor warranty. 608 UHF MHz	12,074.00	9,659.20	9,659.20
10	ZM-520PA	E	ECG and respiration telemetry transmitter with color display: Allows monitoring of up to 8 Vectors of ECG and Respiration at the Central Monitor. ZM-520PA operates for three days on 2 AA batteries. Color LCD display provides viewing of ECG waveform and heart rate and respiration rate numeric values. Review capability includes 10 minute full disclosure and 10 minutes of tabular trends. Multi Lead ECG Screen displays four Leads of ECG. Display indicates Lead status and battery status. ZM-520PA covered by a five year depot repair parts and labor warranty. Does not include ECG Lead set. 608 UHF MHz	2,100.00	1,680.00	16,800.00
15	BSM-3572A/ZA	E	Life Scope BSM-3572 configured bedside monitor	3,900.00	3,120.00	46,800.00



			with 12.1" LCD Display,2 Multi-Port connectors, Nihon Kohden SpO2. Measures ECG (1 vector,8 vector or interpretive 12 Lead),respiration (thermistor or impedance), Nihon Kohden SpO2,NIBP,invasive blood pressures,dual temperature,EtCO2,cardiac output and FiO2. Monitor features Nihon Kohden's exclusive Multi-Port connectors that eliminate the need for modules to monitor multiple parameters,12.1 inch active matrix color LCD 14 trace display,touchscreen operation,drug calculations,hemodynamic calculations,pulmonary calculations,12 Lead ST measurements,12 Lead interpretive ECG and 24 hour multi-wave full disclosure and LS network port. Shipped with ECG patient cable,3 wire snap Lead set,SpO2 connection cable,reusable SpO2 probe,NIBP connection hose, power cable, 1 each adult and child NIBP cuffs. Optional cables are required for monitoring other parameters. Covered by a five year depot repair parts and labor warranty. Routine software updates are free for the life of the monitor			
15	DH-350P	E	Carrying handle for BSM-3500	55.00	44.00	660.00
15	A/0051-16	E	BSM-3500 Mounting Adaptor Plate GCX	75.00	60.00	900.00
15	A/WMM-0002-02	E	A/WMM-0002-02 Pivoting Support Arm for BSM-1700/3500/4000/5000/6000 and OPV-1500 monitors	272.00	217.60	3,264.00
15	A/WMM-0006-04	E	Utility Hook for Cable Management with all Mounting arms.	33.50	26.80	402.00
1	RNS-24/ZA	E	Provides for secondary monitoring of up to sixteen patients that are centrally monitored on a CNS-9701A or CNS-6201A Central Station.One click access to the monitoring selection screen allows the user to rapidly add and delete patients from the RNS display.Comprehensive review function allows for viewing of patient data stored on the CNS Central Station including arrhythmia recall files,ST segment recall and trends,hemodynamic calculation trends and tables,and 72 hour graphical and tabular trends with 1 minute resolution. Recording is available with optional two channel thermal array recorder. Manual or automatic reports may be printed on optional laser printer. Admitting,Discharging and Transferring functions may be performed at either the CNS Central Station or the RNS Remote Network Station. Includes an All-In-One 24" non-touchscreen LCD display/PC with keyboard and mouse.Requires BS-984P-S Extended Viewer Software. Covered by a 2 year depot repair parts and labor warranty.	7,350.00	5,880.00	5,880.00

10	BR-916PA	S	ECG Lead Set 6 Wire Snap Type	117.50	103.40	1,034.00
3	YP-710T	S	Reusable NIBP Cuff Infant. For 8 to 13cm limb. 5 cm wide	42.00	36.96	110.88
5	YP-711T	S	Reusable NIBP Cuff Small Child. For 13 to 18cm limb. 7 cm wide	42.00	36.96	184.80
10	YP-714T	S	Reusable NIBP Cuff Large Adult. For 33 to 45cm limb. 16 cm wide	42.00	36.96	369.60
15	TL-201T	S	Reusable Nihon Kohden SpO2 Adult Finger Probe. For use with Nihon Kohden Pulse Oximetry Monitors.	220.00	193.60	2,904.00
15	SB-671P	S	Rechargeable battery for both BSM-3500 and BSM-6000 series bedside monitors. (Note: May use 2 per BSM-6000 monitor and only 1 per BSM-3500 monitor.)	330.00	290.40	4,356.00
5	JP-920P	S	Smart Modular invasive blood pressure cable (10') for Edwardsdisposable transducers.	189.00	166.32	831.60
10	A/FQW-50-2-100	S	Recording Paper for BSM-3000, BSM-6000, BSM-9000 and LifeScope G9 series monitors. 10 packs per box.	37.50	33.00	330.00
1	BS-984P-S	E	RNS Extended Viewer software option required for the RNS Client network. This software provides communications to the RNS clients foroperation and display of waveforms and numerics. Package includes network switch required for the RNS Client network. Requires server hardware. If QP-983P NetKonnnect is being used,this software will be installed on that server so no additional server would be required.If QP-983P NetKonnnect is not being used then NK-MBG-Dell-GW server is required.	7,454.00	5,963.20	5,963.20
1	A/PWREDGE-R220	N	PC Server hardware for Nihon Kohden Gateway Products; including QP-983P NetKonnnect, QP-984P ECG Gateway, CGS-9001 Communication Gateway, CGS-9002 HL7 Gateway, QP-988P Unified Gateway, QS-07XP Aware Management, and BS-984P RNS Gateway.	3,300.00	3,300.00	3,300.00
2	A/HP-M604N	A	LaserJet printer for CNS-6201A central stations,RNS,WEP-4000 Telemetry Systems and Prefense Early Detection and Notification Systems. Covered by (OEM) original manufacturer's warranty.	1,279.00	1,279.00	2,558.00
1	#INSTALL-SYSTEM	N	System Installation Charge. Basic System Department Installation Charge for networked departments. Additional service charges may be required. Charge is per individual department to be installed.	2,000.00	2,000.00	2,000.00
15	#INSTALL-HW	N	Hardwired Bedside Installation Charge: Cost per bed for each location where a hardwired connection for a bedside is required.	600.00	600.00	9,000.00
1	#INSTALL-NET-CON	N	Charge for additional network drops or connection points.	600.00	600.00	600.00
1	CLINICAL-ED	N	Clinical Partnership Program for Networked	0.00	0.00	0.00

**Appendix B: State of WV - CRFQ\_WV – Request for Quotation**



Purchasing Division  
2019 Washington Street East  
Post Office Box 50130  
Charleston, WV 25305-0130

State of West Virginia  
Request for Quotation  
26 — Medical

Proc Folder: 206735

Doc Description: Telemetry

Proc Type: Central Purchase Order

Date Issued	Solicitation Closes	Solicitation No	Version
2016-12-06	2017-01-03 13:30:00	CRFQ 0506 WEH1700000007	1

**BID RECEIVING LOCATION**

BID CLERK  
DEPARTMENT OF ADMINISTRATION  
PURCHASING DIVISION  
2019 WASHINGTON ST E  
CHARLESTON WV 25305  
US

**VENDOR**

**Vendor Name, Address and Telephone Number:**

Nihon Kohden America, Inc.  
15353 Barranca Parkway  
Irvine, CA 92618  
(949) 580-1555  
(800) 325-0283

**FOR INFORMATION CONTACT THE BUYER**

April Battle  
(304) 558-0067  
april.e.battle@wv.gov

Signature X

FEIN #

95-3431506

DATE

12/30/2016

All offers subject to all terms and conditions contained in this solicitation

**ADDITIONAL INFORMATION:**

The West Virginia Purchasing Division is soliciting bids on behalf of the West Virginia Department of Health and Human Resources (WVDHHR), Bureau for Behavioral Health and Health Facilities (BHFF), Welch Community Hospital to establish a contract for the one-time purchase of fifteen (15) bedside monitors, ten (10) medical surgical wearable patient monitors, and three (3) information centers, and to provide installation and in-service training for medical staff.

INVOICE TO		SHIP TO	
PROCUREMENT OFFICER - 304-436-8708 HEALTH AND HUMAN RESOURCES WELCH COMMUNITY HOSPITAL 454 MCDOWELL ST  WELCH WV24801  US		PROCUREMENT OFFICER - 304-436-8708 HEALTH AND HUMAN RESOURCES WELCH COMMUNITY HOSPITAL 454 MCDOWELL ST  WELCH WV 24801  US	

Line	Comm Ln Desc	Qty	Unit Issue	Unit Price	Total Price
1	Bedside Monitors	15.00000	EA	\$3,120.00	\$46,800.00

Comm Code	Manufacturer	Specification	Model #
42181719	Nihon Kohden	Refer to Detailed Quote	BSM-3572A/ZA

**Extended Description :**

3.1.1 Bedside monitors

INVOICE TO		SHIP TO	
PROCUREMENT OFFICER - 304-436-8708 HEALTH AND HUMAN RESOURCES WELCH COMMUNITY HOSPITAL 454 MCDOWELL ST  WELCH WV24801  US		PROCUREMENT OFFICER - 304-436-8708 HEALTH AND HUMAN RESOURCES WELCH COMMUNITY HOSPITAL 454 MCDOWELL ST  WELCH WV 24801  US	

Line	Comm Ln Desc	Qty	Unit Issue	Unit Price	Total Price
2	Medical surgical wearable patient monitors	10.00000	EA	\$1,680.00	\$16,800.00

Comm Code	Manufacturer	Specification	Model #
42181719	Nihon Kohden	Refer to Detailed Quote	ZM-52OPA

**Extended Description :**

3.1.2 Medical surgical wearable patient monitors

INVOICE TO		SHIP TO	
PROCUREMENT OFFICER - 304-436-8708 HEALTH AND HUMAN RESOURCES WELCH COMMUNITY HOSPITAL 454 MCDOWELL ST WELCH WV24801 US		PROCUREMENT OFFICER - 304-436-8708 HEALTH AND HUMAN RESOURCES WELCH COMMUNITY HOSPITAL 454 MCDOWELL ST WELCH WV 24801 US	

Line	Comm Ln Desc	Qty	Unit Issue	Unit Price	Total Price
3	Information centers	3.00000	EA	\$35,025.60*	\$75,931.20

Comm Code	Manufacturer	Specification	Model #
42181719	Nihon Kohden	Refer to Detailed Quote	CNS-6201-16-S and RNS-24/ZA

**Extended Description :**

3.1.3 Information centers

\*NKA is quoting 2 CNS Monitoring Systems - \$70,051.20 and 1 RNS Monitoring System - \$5,880.00 at a total price for all 3 at \$75,931.20

INVOICE TO		SHIP TO	
PROCUREMENT OFFICER - 304-436-8708 HEALTH AND HUMAN RESOURCES WELCH COMMUNITY HOSPITAL 454 MCDOWELL ST WELCH WV24801 US		PROCUREMENT OFFICER - 304-436-8708 HEALTH AND HUMAN RESOURCES WELCH COMMUNITY HOSPITAL 454 MCDOWELL ST WELCH WV 24801 US	

Line	Comm Ln Desc	Qty	Unit Issue	Unit Price	Total Price
4	Warranty	1.00000	EA	\$0	\$0

Comm Code	Manufacturer	Specification	Model #
84101503	Nihon Kohden	Refer to Detailed Quote	N/A

**Extended Description :** NKA offers a 5-year warranty on BSM-3500 series monitors and telemetry transmitters; 2-year warranty on CNS;  
3.1.4 Warranty Extended Warranty available

INVOICE TO		SHIP TO	
PROCUREMENT OFFICER - 304-436-8708 HEALTH AND HUMAN RESOURCES WELCH COMMUNITY HOSPITAL 454 MCDOWELL ST WELCH WV24801 US		PROCUREMENT OFFICER - 304-436-8708 HEALTH AND HUMAN RESOURCES WELCH COMMUNITY HOSPITAL 454 MCDOWELL ST WELCH WV 24801 US	

Line	Comm Ln Desc	Qty	Unit Issue	Unit Price	Total Price
5	Manual/CDs	1.00000	EA	\$0	\$0

Comm Code	Manufacturer	Specification	Model #
55101521	Nihon Kohden	N/A	N/A

**Extended Description :**

3.1.5 Manual/CDs

INVOICE TO		SHIP TO	
PROCUREMENT OFFICER - 304-436-8708 HEALTH AND HUMAN RESOURCES WELCH COMMUNITY HOSPITAL 454 MCDOWELL ST WELCH WV24801 US		PROCUREMENT OFFICER - 304-436-8708 HEALTH AND HUMAN RESOURCES WELCH COMMUNITY HOSPITAL 454 MCDOWELL ST WELCH WV 24801 US	

Line	Comm Ln Desc	Qty	Unit Issue	Unit Price	Total Price
6	Installation	1.00000	EA	\$11,600.00	\$11,600.00

Comm Code	Manufacturer	Specification	Model #
81111809	Nihon Kohden	Refer to Detailed Quote	N/A

**Extended Description :**

3.1.6 Installation

INVOICE TO		SHIP TO	
PROCUREMENT OFFICER - 304-436-8708 HEALTH AND HUMAN RESOURCES WELCH COMMUNITY HOSPITAL 454 MCDOWELL ST WELCH WV24801 US		PROCUREMENT OFFICER - 304-436-8708 HEALTH AND HUMAN RESOURCES WELCH COMMUNITY HOSPITAL 454 MCDOWELL ST WELCH WV 24801 US	

Line	Comm Ln Desc	Qty	Unit Issue	Unit Price	Total Price
7	In-service medical staff	1.00000	EA	\$0	\$0

Comm Code	Manufacturer	Specification	Model #
86000000	Nihon Kohden	N/A	N/A

**Extended Description :**

3.1.7 In-service medical staff

**SCHEDULE OF EVENTS**

Line	Event	Event Date
1	Questions Due	2016-12-20

## **Appendix C: State of WV - Terms and Conditions and Addendum Acknowledgement**



## INSTRUCTIONS TO VENDORS SUBMITTING BIDS

**1. REVIEW DOCUMENTS THOROUGHLY:** The attached documents contain a solicitation for bids. Please read these instructions and all documents attached in their entirety. These instructions provide critical information about requirements that if overlooked could lead to disqualification of a Vendor's bid. All bids must be submitted in accordance with the provisions contained in these instructions and the Solicitation. Failure to do so may result in disqualification of Vendor's bid.

**2. MANDATORY TERMS:** The Solicitation may contain mandatory provisions identified by the use of the words "must," "will," and "shall." Failure to comply with a mandatory term in the Solicitation will result in bid disqualification.

**3. PREBID MEETING:** The item identified below shall apply to this Solicitation.

☒ A pre-bid meeting will not be held prior to bid opening

**NKA Response: Acknowledged.**

☐ **NON-MANDATORY PRE-BID** meeting will be held at the following place and time:

☐ **MANDATORY PRE-BID** meeting will be held at the following place and time:

All Vendors submitting a bid must attend the mandatory pre-bid meeting. Failure to attend the mandatory pre-bid meeting shall result in disqualification of the Vendor's bid. No one person attending the pre-bid meeting may represent more than one Vendor.

An attendance sheet provided at the pre-bid meeting shall serve as the official document verifying attendance. The State will not accept any other form of proof or documentation to verify attendance. Any person attending the pre-bid meeting on behalf of a Vendor must list on the attendance sheet his or her name and the name of the Vendor he or she is representing.

Additionally, the person attending the pre-bid meeting should include the Vendor's E-Mail address, phone number, and Fax number on the attendance sheet. It is the Vendor's responsibility to locate the attendance sheet and provide the required information. Failure to complete the attendance sheet as required may result in disqualification of Vendor's bid.

All Vendors should arrive prior to the starting time for the pre-bid. Vendors who arrive after the starting time but prior to the end of the pre-bid will be permitted to sign in, but are charged with knowing all matters discussed at the pre-bid.

Questions submitted at least five business days prior to a scheduled pre-bid will be discussed at the pre-bid meeting if possible. Any discussions or answers to questions at the pre-bid meeting are preliminary in nature and are non-binding. Official and binding answers to questions will be published in a written addendum to the Solicitation prior to bid opening.

**4. VENDOR QUESTION DEADLINE:** Vendors may submit questions relating to this Solicitation to the Purchasing Division. Questions must be submitted in writing. All questions must be submitted on or before the date listed below and to the address listed below in order to be considered. A written response will be published in a Solicitation addendum if a response is possible and appropriate. Non-written discussions, conversations, or questions and answers regarding this Solicitation are preliminary in nature and are nonbinding.

Submitted e-mails should have solicitation number in the subject line.

Question Submission Deadline: December 20, 2016, at 3:00 PM EST

Submit Questions to: April Battle, Buyer 22

2019 Washington Street, East

Charleston, WV 25305

Fax: (304) 558-4115 (Vendors should not use this fax number for bid submission)

Email: [april.e.battle@wv.gov](mailto:april.e.battle@wv.gov)

**5. VERBAL COMMUNICATION:** Any verbal communication between the Vendor and any State personnel is not binding, including verbal communication at the mandatory pre-bid conference. Only information issued in writing and added to the Solicitation by an official written addendum by the Purchasing Division is binding.

**6. BID SUBMISSION:** All bids must be submitted electronically through wvOASIS or signed and delivered by the Vendor to the Purchasing Division at the address listed below on or before the date and time of the bid opening. Any bid received by the Purchasing Division staff is considered to be in the possession of the Purchasing Division and will not be returned for any reason. The Purchasing Division will not accept bids, modification of bids, or addendum acknowledgment forms via e-mail. Acceptable delivery methods include electronic submission via wvOASIS, hand delivery, delivery by courier, or facsimile.

The bid delivery address is:  
Department of Administration, Purchasing Division  
2019 Washington Street East  
Charleston, WV 25305-0130

A bid that is not submitted electronically through wvOASIS should contain the information listed below on the face of the envelope or the bid may be rejected by the Purchasing Division.:

SEALED BID: Telemetry  
BUYER: April Battle, Buyer 22  
SOLICITATION NO.: CRFQ 0506 WEH1700000007  
BID OPENING DATE: January 3, 2017  
BID OPENING TIME: 1:30 PM EST  
FAX NUMBER: (304) 558-3970

The Purchasing Division may prohibit the submission of bids electronically through wvOASIS at its sole discretion. Such a prohibition will be contained and communicated in the wvOASIS system resulting in the Vendor's inability to submit bids through wvOASIS. Submission of a response to an Expression or Interest or Request for Proposal is not permitted in wvOASIS.

**For Request For Proposal ("RFP") Responses Only:** In the event that Vendor is responding to a request for proposal, the Vendor shall submit one original technical and one original cost proposal plus \_\_\_\_\_ convenience copies of each to the Purchasing Division at the address shown above. Additionally, the Vendor should identify the bid type as either a technical or cost proposal on the face of each bid envelope submitted in response to a request for proposal as follows:

BID TYPE: (This only applies to CRFP)

- ☐ Technical  
☐ Cost

**7. BID OPENING:** Bids submitted in response to this Solicitation will be opened at the location identified below on the date and time listed below. Delivery of a bid after the bid opening date and time will result in bid disqualification. For purposes of this Solicitation, a bid is considered delivered when confirmation of delivery is provided by wvOASIS (in the case of electronic submission) or when the bid is time stamped by the official Purchasing Division time clock (in the case of hand delivery).

Bid Opening Date and Time: January 3, 2017, at 1:30 PM EST

Bid Opening Location: Department of Administration, Purchasing Division  
2019 Washington Street East  
Charleston, WV 25305-0130

**8. ADDENDUM ACKNOWLEDGEMENT:** Changes or revisions to this Solicitation will be made by an official written addendum issued by the Purchasing Division. Vendor should acknowledge receipt of all addenda issued with this Solicitation by completing an Addendum Acknowledgment Form, a copy of which is included herewith. Failure to acknowledge addenda may result in bid disqualification. The addendum acknowledgement should be submitted with the bid to expedite document processing.

**9. BID FORMATTING:** Vendor should type or electronically enter the information onto its bid to prevent errors in the evaluation. Failure to type or electronically enter the information may result in bid disqualification.

**10. ALTERNATES:** Any model, brand, or specification listed in this Solicitation establishes the acceptable level of quality only and is not intended to reflect a preference for, or in any way favor, a particular brand or vendor. Vendors may bid alternates to a listed model or brand provided that the alternate is at least equal to the model or brand and complies with the required specifications. The equality of any alternate being bid shall be determined by the State at its sole discretion. Any Vendor bidding an alternate model or brand should clearly identify the alternate items in its bid and should include manufacturer's specifications, industry literature, and/or any other relevant documentation demonstrating the equality of the alternate items. Failure to provide information for alternate items may be grounds for rejection of a Vendor's bid.

**11. EXCEPTIONS AND CLARIFICATIONS:** The Solicitation contains the specifications that shall form the basis of a contractual agreement. Vendor shall clearly mark any exceptions, clarifications, or other proposed modifications in its bid. Exceptions to, clarifications of, or modifications of a requirement or term and condition of the Solicitation may result in bid disqualification.

**12. COMMUNICATION LIMITATIONS:** In accordance with West Virginia Code of State Rules §148-1-6.6, communication with the State of West Virginia or any of its employees regarding this Solicitation during the solicitation, bid, evaluation or award periods, except through the Purchasing Division, is strictly prohibited without prior Purchasing Division approval. Purchasing Division approval for such communication is implied for all agency delegated and exempt purchases.

**13. REGISTRATION:** Prior to Contract award, the apparent successful Vendor must be properly registered with the West Virginia Purchasing Division and must have paid the \$125 fee, if applicable.

**14. UNIT PRICE:** Unit prices shall prevail in cases of a discrepancy in the Vendor's bid.

**15. PREFERENCE:** Vendor Preference may only be granted upon written request and only in accordance with the West Virginia Code § 5A-3-37 and the West Virginia Code of State Rules. A Vendor Preference Certificate form has been attached hereto to allow Vendor to apply for the preference. Vendor's failure to submit the Vendor Preference Certificate form with its bid will result in denial of Vendor Preference. Vendor Preference does not apply to construction projects.

**16. SMALL, WOMEN-OWNED, OR MINORITY-OWNED BUSINESSES:** For any solicitations publicly advertised for bid, in accordance with West Virginia Code §5A-3-37(a)(7) and W. Va. CSR§ 148-22-9, any non-resident vendor certified as a small, women-owned, or minority-owned business under W. Va. CSR§ 148-22-9 shall be provided the same preference made available to any resident vendor. Any non-resident small, women-owned, or minority-owned business must identify itself as such in writing, must submit that writing to the Purchasing Division with its bid, and must be properly certified under W. Va. CSR§ 148-22-9 prior to contract award to receive the preferences made available to resident vendors. Preference for a non-resident small, women-owned, or minority owned business shall be applied in accordance with W. Va. CSR§ 148-22-9.

**17. WAIVER OF MINOR IRREGULARITIES:** The Director reserves the right to waive minor irregularities in bids or specifications in accordance with West Virginia Code of State Rules §148-1-4.6.

**18. ELECTRONIC FILE ACCESS RESTRICTIONS:** Vendor must ensure that its submission in wvOASIS can be accessed and viewed by the Purchasing Division staff immediately upon bid opening. The Purchasing Division will consider any file that cannot be immediately accessed and viewed at the time of the bid opening (such as, encrypted files, password protected files, or incompatible files) to be blank or incomplete as context requires, and are therefore unacceptable. A vendor will not be permitted to unencrypt files, remove password protections, or resubmit documents after bid opening to make a file viewable if those documents are required with the bid. A Vendor may be required to provide document passwords or remove access restrictions to allow the Purchasing Division to print or electronically save documents provided that those documents are viewable by the Purchasing Division prior to obtaining the password or removing the access restriction.

**19. NON-RESPONSIBLE:** The Purchasing Division Director reserves the right to reject the bid of any vendor as Non-Responsible in accordance with W. Va. Code of State Rules § 148-1-5.3, when the Director determines that the vendor submitting the bid does not have the capability to fully perform, or lacks the integrity and reliability to assure good-faith performance."

**20. ACCEPTANCE/REJECTION:** The State may accept or reject any bid in whole, or in part in accordance with W. Va. Code of State Rules§ 148-1-4.5. and § 148-1-6.4.b."

**21. YOUR SUBMISSION IS A PUBLIC DOCUMENT:** Vendor's entire response to the Solicitation and the resulting Contract are public documents. As public documents, they will be disclosed to the public following the bid/proposal opening or award of the contract, as required by the competitive bidding laws of West Virginia Code §§ SA-3-1 et seq., 5-22-1 et seq., and SG-1-1 et seq. and the Freedom of Information Act West Virginia Code §§ 29B-1-1 et seq.

**DO NOT SUBMIT MATERIAL YOU CONSIDER TO BE CONFIDENTIAL, A TRADE SECRET, OR OTHERWISE NOT SUBJECT TO PUBLIC DISCLOSURE.**

Submission of any bid, proposal, or other document to the Purchasing Division constitutes your explicit consent to the subsequent public disclosure of the bid, proposal, or document. The Purchasing Division will disclose any document labeled "confidential," "proprietary," "trade secret," "private," or labeled with any other claim against public disclosure of the documents, to include any "trade secrets" as defined by West Virginia Code § 47-22-1 et seq. All submissions are subject to public disclosure without notice.

**NKA Response: Acknowledged.**

**NKA Response: NKA accepts the General Terms and Conditions as presented.**

**GENERAL TERMS AND CONDITIONS:**

**1. CONTRACTUAL AGREEMENT:** Issuance of a Award Document signed by the Purchasing Division Director, or his designee, and approved as to form by the Attorney General's office constitutes acceptance of this Contract made by and between the State of West Virginia and the Vendor. Vendor's signature on its bid signifies Vendor's agreement to be bound by and accept the terms and conditions contained in this Contract.

**2. DEFINITIONS:** As used in this Solicitation/Contract, the following terms shall have the meanings attributed to them below. Additional definitions may be found in the specifications included with this Solicitation/Contract.

**2.1. "Agency" or "Agencies"** means the agency, board, commission, or other entity of the State of West Virginia that is identified on the first page of the Solicitation or any other public entity seeking to procure goods or services under this Contract.

**2.2. "Bid" or "Proposal"** means the vendors submitted response to this solicitation.

**2.3. "Contract"** means the binding agreement that is entered into between the State and the Vendor to provide the goods or services requested in the Solicitation.

**2.4. "Director"** means the Director of the West Virginia Department of Administration, Purchasing Division.

**2.5. "Purchasing Division"** means the West Virginia Department of Administration, Purchasing Division.

**2.6. "Award Document"** means the document signed by the Agency and the Purchasing Division, and approved as to form by the Attorney General, that identifies the Vendor as the contract holder.

**2.7. "Solicitation"** means the official notice of an opportunity to supply the State with goods or services that is published by the Purchasing Division.

**2.8. "State"** means the State of West Virginia and/or any of its agencies, commissions, boards, etc. as context requires.

**2.9. "Vendor" or "Vendors"** means any entity submitting a bid in response to the Solicitation, the entity that has been selected as the lowest responsible bidder, or the entity that has been awarded the Contract as context requires.

**3. CONTRACT TERM; RENEWAL; EXTENSION:** The term of this Contract shall be determined in accordance with the category that has been identified as applicable to this Contract below:

☐ **Term Contract**

**Initial Contract Term:** This Contract becomes effective on \_\_\_\_\_ and extends for a period of \_\_\_\_\_ year(s).

**Renewal Term:** This Contract may be renewed upon the mutual written consent of the Agency, and the Vendor, with approval of the Purchasing Division and the Attorney General's office (Attorney General approval is as to form only). Any request for renewal should be submitted to the Purchasing Division thirty (30) days prior to the expiration date of the initial contract term or appropriate renewal term. A Contract renewal shall be in accordance with the terms and conditions of the original contract. Renewal of this Contract is limited to \_\_\_\_\_ successive one (1) year periods or multiple renewal periods of less than one year, provided that the multiple renewal periods do not exceed \_\_\_\_\_ months in total. Automatic renewal of this Contract is prohibited. Notwithstanding the foregoing, Purchasing Division approval is not required on agency delegated or exempt purchases. Attorney General approval may be required for vendor terms and conditions.

**Delivery Order Limitations:** In the event that this contract permits delivery orders, a delivery order may only be issued during the time this Contract is in effect. Any delivery order issued within one year of the expiration of this Contract shall be effective for one year from the date the delivery order is issued. No delivery order may be extended beyond one year after this Contract has expired.

☒ **Fixed Period Contract:** This Contract becomes effective upon Vendor's receipt of the notice to proceed and must be completed within ninety (90) calendar days.

☐ **Fixed Period Contract with Renewals:** This Contract becomes effective upon Vendor's receipt of the notice to proceed and part of the Contract more fully described in the attached specifications must be completed within \_\_\_\_\_ days.

Upon completion, the vendor agrees that maintenance, monitoring, or warranty services will be provided for one year thereafter with an additional \_\_\_\_\_ successive one year renewal periods or multiple renewal periods of less than one year provided that the multiple renewal periods do not exceed \_\_\_\_\_ months in total. Automatic renewal of this Contract is prohibited.

☐ **One Time Purchase:** The term of this Contract shall run from the issuance of the Award Document until all of the goods contracted for have been delivered, but in no event will this Contract extend for more than one fiscal year.

☐ **Other:** See attached.



**4. NOTICE TO PROCEED:** Vendor shall begin performance of this Contract immediately upon receiving notice to proceed unless otherwise instructed by the Agency. Unless otherwise specified, the fully executed Award Document will be considered notice to proceed.

**5. QUANTITIES:** The quantities required under this Contract shall be determined in accordance with the category that has been identified as applicable to this Contract below.

☐ **Open End Contract:** Quantities listed in this Solicitation are approximations only, based on estimates supplied by the Agency. It is understood and agreed that the Contract shall cover the quantities actually ordered for delivery during the term of the Contract, whether more or less than the quantities shown.

☐ **Service:** The scope of the service to be provided will be more clearly defined in the specifications included herewith.

☒ **Combined Service and Goods:** The scope of the service and deliverable goods to be provided will be more clearly defined in the specifications included herewith.

☐ **One Time Purchase:** This Contract is for the purchase of a set quantity of goods that are identified in the specifications included herewith. Once those items have been delivered, no additional goods may be procured under this Contract without an appropriate change order approved by the Vendor, Agency, Purchasing Division, and Attorney General's office.

**6. EMERGENCY PURCHASES:** The Purchasing Division Director may authorize the Agency to purchase goods or services in the open market that Vendor would otherwise provide under this Contract if those goods or services are for immediate or expedited delivery in an emergency. Emergencies shall include, but are not limited to, delays in transportation or an unanticipated increase in the volume of work. An emergency purchase in the open market, approved by the Purchasing Division Director, shall not constitute of breach of this Contract and shall not entitle the Vendor to any form of compensation or damages. This provision does not excuse the State from fulfilling its obligations under a One Time Purchase contract.

**7. REQUIRED DOCUMENTS:** All of the items checked below must be provided to the Purchasing Division by the Vendor as specified below.

☐ **BID BOND (Construction Only):** Pursuant to the requirements contained in W. Va. Code § 5-22-1(c), All Vendors submitting a bid on a construction project shall furnish a valid bid bond in the amount of five percent (5%) of the total amount of the bid protecting the State of West Virginia. The bid bond must be submitted with the bid.

☐ **PERFORMANCE BOND:** The apparent successful Vendor shall provide a performance bond in the amount of \_\_\_\_\_. The performance bond must be received by the Purchasing Division prior to Contract award. On construction contracts, the performance bond must be 100% of the Contract value.

☐ **LABOR/MATERIAL PAYMENT BOND:** The apparent successful Vendor shall provide a labor/material payment bond in the amount of 100% of the Contract value. The labor/material payment bond must be delivered to the Purchasing Division prior to Contract award. In lieu of the Bid Bond, Performance Bond, and Labor/Material Payment Bond, the Vendor may provide certified checks, cashier's checks, or irrevocable letters of credit. Any certified check, cashier's check, or irrevocable letter of credit provided in lieu of a bond must be of the same amount and delivered on the same schedule as the bond it replaces. A letter of credit submitted in lieu of a performance and labor/material payment bond will only be allowed for projects under \$100,000. Personal or business checks are not acceptable.

☐ **MAINTENANCE BOND:** The apparent successful Vendor shall provide a two (2) year maintenance bond covering the roofing system. The maintenance bond must be issued and delivered to the Purchasing Division prior to Contract award.

☒ **INSURANCE:** The apparent successful Vendor shall furnish proof of the following insurance prior to Contract award and shall list the state as a certificate holder:

☒ **Commercial General Liability Insurance:** In the amount of \$1,000,000.00  
\_\_\_\_\_ or more.

☐ **Builders Risk Insurance:** In an amount equal to 100% of the amount of the Contract.

☐

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The apparent successful Vendor shall also furnish proof of any additional insurance requirements contained in the specifications prior to Contract award regardless of whether or not that insurance requirement is listed above.

☐ **LICENSE(S) / CERTIFICATIONS / PERMITS:** In addition to anything required under the Section entitled Licensing, of the General Terms and Conditions, the apparent successful Vendor shall furnish proof of the following licenses, certifications, and/or permits prior to Contract award, in a form acceptable to the Purchasing Division.

☐

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☐

The apparent successful Vendor shall also furnish proof of any additional licenses or certifications contained in the specifications prior to Contract award regardless of whether or not that requirement is listed above.

**8. WORKERS' COMPENSATION INSURANCE:** The apparent successful Vendor shall comply with laws relating to workers compensation, shall maintain workers' compensation insurance when required, and shall furnish proof of workers' compensation insurance upon request.

**9. LITIGATION BOND:** The Director reserves the right to require any Vendor that files a protest of an award to submit a litigation bond in the amount equal to one percent of the lowest bid submitted or \$5,000, whichever is greater. The entire amount of the bond shall be forfeited if the hearing officer determines that the protest was filed for frivolous or improper purpose, including but not limited to, the purpose of harassing, causing unnecessary delay, or needless expense for the Agency. All litigation bonds shall be made payable to the Purchasing Division. In lieu of a bond, the protester may submit a cashier's check or certified check payable to the Purchasing Division. Cashier's or certified checks will be deposited with and held by the State Treasurer's office. If it is determined that the protest has not been filed for frivolous or improper purpose, the bond or deposit shall be returned in its entirety.

**10. LIQUIDATED DAMAGES:** Vendor shall pay liquidated damages in the amount of  
N/A

for N/A

This clause shall in no way be considered exclusive and shall not limit the State or Agency's right to pursue any other available remedy.

**11. ACCEPTANCE:** Vendor's signature on its bid, or on the certification and signature page, constitutes an offer to the State that cannot be unilaterally withdrawn, signifies that the product or service proposed by vendor meets the mandatory requirements contained in the Solicitation for that product or service, unless otherwise indicated, and signifies acceptance of the terms and conditions contained in the Solicitation unless otherwise indicated.

**12. PRICING:** The pricing set forth herein is firm for the life of the Contract, unless specified elsewhere within this Solicitation/Contract by the State. A Vendor's inclusion of price adjustment provisions in its bid, without an express authorization from the State in the Solicitation to do so, may result in bid disqualification.

**13. PAYMENT:** Payment in advance is prohibited under this Contract. Payment may only be made after the delivery and acceptance of goods or services. The Vendor shall submit invoices, in arrears.

**14. PURCHASING CARD ACCEPTANCE:** The State of West Virginia currently utilizes a Purchasing Card program, administered under contract by a banking institution, to process payment for goods and services. The Vendor must accept the State of West Virginia's Purchasing Card for payment of all orders under this Contract unless the box below is checked.

☐ Vendor is not required to accept the State of West Virginia's Purchasing Card as payment for all goods and services.

**15. TAXES:** The Vendor shall pay any applicable sales, use, personal property or any other taxes arising out of this Contract and the transactions contemplated thereby. The State of West Virginia is exempt from federal and state taxes and will not pay or reimburse such taxes.

**16. ADDITIONAL FEES:** Vendor is not permitted to charge additional fees or assess additional charges that were not either expressly provided for in the solicitation published by the State of West Virginia or included in the unit price or lump sum bid amount that Vendor is required by the solicitation to provide. Including such fees or charges as notes to the solicitation may result in rejection of vendor's bid. Requesting such fees or charges be paid after the contract has been awarded may result in cancellation of the contract.

**17. FUNDING:** This Contract shall continue for the term stated herein, contingent upon funds being appropriated by the Legislature or otherwise being made available. In the event funds are not appropriated or otherwise made available, this Contract becomes void and of no effect beginning on July 1 of the fiscal year for which funding has not been appropriated or otherwise made available.

**18. CANCELLATION:** The Purchasing Division Director reserves the right to cancel this Contract immediately upon written notice to the vendor if the materials or workmanship supplied do not conform to the specifications contained in the Contract. The Purchasing Division Director may also cancel any purchase or Contract upon 30 days written notice to the Vendor in accordance with West Virginia Code of State Rules § 148-1-6.1.e.

**19. TIME:** Time is of the essence with regard to all matters of time and performance in this Contract.

**20. APPLICABLE LAW:** This Contract is governed by and interpreted under West Virginia law without giving effect to its choice of law principles. Any information provided in specification manuals, or any other source, verbal or written, which contradicts or violates the West Virginia Constitution, West Virginia Code or West Virginia Code of State Rules is void and of no effect.

**21. COMPLIANCE:** Vendor shall comply with all applicable federal, state, and local laws, regulations and ordinances. By submitting a bid, Vendor acknowledges that it has reviewed, understands, and will comply with all applicable laws, regulations, and ordinances.

**22. ARBITRATION:** Any references made to arbitration contained in this Contract, Vendor's bid, or in any American Institute of Architects documents pertaining to this Contract are hereby deleted, void, and of no effect.

**23. MODIFICATIONS:** This writing is the parties' final expression of intent. Notwithstanding anything contained in this Contract to the contrary no modification of this Contract shall be binding without mutual written consent of the Agency, and the Vendor, with approval of the Purchasing Division and the Attorney General's office (Attorney General approval is as to form only). Any change to existing contracts that adds work or changes contract cost, and were not included in the original contract, must be approved by the Purchasing Division and the Attorney General's Office (as to form) prior to the implementation of the change or commencement of work affected by the change.

**24. WAIVER:** The failure of either party to insist upon a strict performance of any of the terms or provision of this Contract, or to exercise any option, right, or remedy herein contained, shall not be construed as a waiver or a relinquishment for the future of such term, provision, option, right, or remedy, but the same shall continue in full force and effect. Any waiver must be expressly stated in writing and signed by the waiving party.

**25. SUBSEQUENT FORMS:** The terms and conditions contained in this Contract shall supersede any and all subsequent terms and conditions which may appear on any form documents submitted by Vendor to the Agency or Purchasing Division such as price lists, order forms, invoices, sales agreements, or maintenance agreements, and includes internet websites or other electronic documents. Acceptance or use of Vendor's forms does not constitute acceptance of the terms and conditions contained thereon.

**26. ASSIGNMENT:** Neither this Contract nor any monies due, or to become due hereunder, may be assigned by the Vendor without the express written consent of the Agency, the Purchasing Division, the Attorney General's office (as to form only), and any other government agency or office that may be required to approve such assignments. Notwithstanding the foregoing, Purchasing Division approval may or may not be required on certain agency delegated or exempt purchases.

**27. WARRANTY:** The Vendor expressly warrants that the goods and/or services covered by this Contract will: (a) conform to the specifications, drawings, samples, or other description furnished or specified by the Agency; (b) be merchantable and fit for the purpose intended; and (c) be free from defect in material and workmanship.

**28. STATE EMPLOYEES:** State employees are not permitted to utilize this Contract for personal use and the Vendor is prohibited from permitting or facilitating the same.

**29. BANKRUPTCY:** In the event the Vendor files for bankruptcy protection, the State of West Virginia may deem this Contract null and void, and terminate this Contract without notice.

**30. PRIVACY, SECURITY, AND CONFIDENTIALITY:** The Vendor agrees that it will not disclose to anyone, directly or indirectly, any such personally identifiable information or other confidential information gained from the Agency, unless the individual who is the subject of the information consents to the disclosure in writing or the disclosure is made pursuant to the Agency's policies, procedures, and rules. Vendor further agrees to comply with the Confidentiality Policies and Information Security Accountability Requirements, set forth in <http://www.state.wv.us/admin/purchase/privacy/default.html>.

**31. YOUR SUBMISSION IS A PUBLIC DOCUMENT:** Vendor's entire response to the Solicitation and the resulting Contract are public documents. As public documents, they will be disclosed to the public following the bid/proposal opening or award of the contract, as required by the competitive bidding laws of West Virginia Code §§ SA-3-1 et seq., 5-22-1 et seq., and 5G-1-1 et seq. and the Freedom of Information Act West Virginia Code §§ 29B-1-1 et seq.

**DO NOT SUBMIT MATERIAL YOU CONSIDER TO BE CONFIDENTIAL, A TRADE SECRET, OR OTHERWISE NOT SUBJECT TO PUBLIC DISCLOSURE.**

Submission of any bid, proposal, or other document to the Purchasing Division constitutes your explicit consent to the subsequent public disclosure of the bid, proposal, or document. The Purchasing Division will disclose any document labeled "confidential," "proprietary," "trade secret," "private," or labeled with any other claim against public disclosure of the documents, to include any "trade secrets" as defined by West Virginia Code § 47-22-1 et seq. All submissions are subject to public disclosure without notice.

**32. LICENSING:** In accordance with West Virginia Code of State Rules § 148-1-6.1, Vendor must be licensed and in good standing in accordance with any and all state and local laws and requirements by any state or local agency of West Virginia, including, but not limited to, the West Virginia Secretary of State's Office, the West Virginia Tax Department, West Virginia Insurance Commission, or any other state agency or political subdivision. Upon request, the Vendor must provide all necessary releases to obtain information to enable the Purchasing Division Director or the Agency to verify that the Vendor is licensed and in good standing with the above entities.

**33. ANTITRUST:** In submitting a bid to, signing a contract with, or accepting a Award Document from any agency of the State of West Virginia, the Vendor agrees to convey, sell, assign, or transfer to the State of West Virginia all rights, title, and interest in and to all causes of action it may now or hereafter acquire under the antitrust laws of the United States and the State of West Virginia for price fixing and/or unreasonable restraints of trade relating to the particular commodities or services purchased or acquired by the State of West Virginia. Such assignment shall be made and become effective at the time the purchasing agency tenders the initial payment to Vendor.

**34. VENDOR CERTIFICATIONS:** By signing its bid or entering into this Contract, Vendor certifies (1) that its bid or offer was made without prior understanding, agreement, or connection with any corporation, firm, limited liability company, partnership, person or entity submitting a bid or offer for the same material, supplies, equipment or services; (2) that its bid or offer is in all respects fair and without collusion or fraud; (3) that this Contract is accepted or entered into without any prior understanding, agreement, or connection to any other entity that could be considered a violation of law; and (4) that it has reviewed this Solicitation in its entirety; understands the requirements, terms and conditions, and other information contained herein.

Vendor's signature on its bid or offer also affirms that neither it nor its representatives have any interest, nor shall acquire any interest, direct or indirect, which would compromise the performance of its services hereunder. Any such interests shall be promptly presented in detail to the Agency. The individual signing this bid or offer on behalf of Vendor certifies that he or she is authorized by the Vendor to execute this bid or offer or any documents related thereto on Vendor's behalf; that he or she is authorized to bind the Vendor in a contractual relationship; and that, to the best of his or her knowledge, the Vendor has properly registered with any State agency that may require registration.

**35. VENDOR RELATIONSHIP:** The relationship of the Vendor to the State shall be that of an independent contractor and no principal-agent relationship or employer-employee relationship is contemplated or created by this Contract. The Vendor as an independent contractor is solely liable for the acts and omissions of its employees and agents. Vendor shall be responsible for selecting, supervising, and compensating any and all individuals employed pursuant to the terms of this Solicitation and resulting contract. Neither the Vendor, nor any employees or subcontractors of the Vendor, shall be deemed to be employees of the State for any purpose whatsoever. Vendor shall be exclusively responsible for payment of employees and contractors for all wages and salaries, taxes, withholding payments, penalties, fees, fringe benefits, professional liability insurance premiums, contributions to insurance and pension, or other deferred compensation plans, including but not limited to, Workers' Compensation and Social Security obligations, licensing fees, etc. and the filing of all necessary documents, forms, and returns pertinent to all of the foregoing.

Vendor shall hold harmless the State, and shall provide the State and Agency with a defense against any and all claims including, but not limited to, the foregoing payments, withholdings, contributions, taxes, Social Security taxes, and employer income tax returns.

**36. INDEMNIFICATION:** The Vendor agrees to indemnify, defend, and hold harmless the State and the Agency, their officers, and employees from and against: (1) Any claims or losses for services rendered by any subcontractor, person, or firm performing or supplying services, materials, or supplies in connection with the performance of the Contract; (2) Any claims or losses resulting to any person or entity injured or damaged by the Vendor, its officers, employees, or subcontractors by the publication, translation, reproduction, delivery, performance, use, or disposition of any data used under the Contract in a manner not authorized by the Contract, or by Federal or State statutes or regulations; and (3) Any failure of the Vendor, its officers, employees, or subcontractors to observe State and Federal laws including, but not limited to, labor and wage and hour laws.

**37. PURCHASING AFFIDAVIT:** In accordance with West Virginia Code § 5A-3-10a, all Vendors are required to sign, notarize, and submit the Purchasing Affidavit stating that neither the Vendor nor a related party owe a debt to the State in excess of \$1,000. The affidavit must be submitted prior to award, but should be submitted with the Vendor's bid. A copy of the Purchasing Affidavit is included herewith.

**38. ADDITIONAL AGENCY AND LOCAL GOVERNMENT USE:** This Contract may be utilized by other agencies, spending units, and political subdivisions of the State of West Virginia; county, municipal, and other local government bodies; and school districts ("Other Government Entities"). Any extension of this Contract to the aforementioned Other Government Entities must be on the same prices, terms, and conditions as those offered and agreed to in this Contract, provided that such extension is in compliance with the applicable laws, rules, and ordinances of the Other Government Entity. If the Vendor does not wish to extend the prices, terms, and conditions of its bid and subsequent contract to the Other Government Entities, the Vendor must clearly indicate such refusal in its bid. A refusal to extend this Contract to the Other Government Entities shall not impact or influence the award of this Contract in any manner.

**39. CONFLICT OF INTEREST:** Vendor, its officers or members or employees, shall not presently have or acquire an interest, direct or indirect, which would conflict with or compromise the performance of its obligations hereunder. Vendor shall periodically inquire of its officers, members and employees to ensure that a conflict of interest does not arise. Any conflict of interest discovered shall be promptly presented in detail to the Agency.

**40. REPORTS:** Vendor shall provide the Agency and/or the Purchasing Division with the following reports identified by a checked box below:

☒ Such reports as the Agency and/or the Purchasing Division may request. Requested reports may include, but are not limited to, quantities purchased, agencies utilizing the contract, total contract expenditures by agency, etc.

☐ Quarterly reports detailing the total quantity of purchases in units and dollars, along with a listing of purchases by agency. Quarterly reports should be delivered to the Purchasing Division via email at [purchasing.requisitions@wv.gov](mailto:purchasing.requisitions@wv.gov).



**41. BACKGROUND CHECK:** In accordance with W. Va. Code§ 15-2D-3, the Director of the Division of Protective Services shall require any service provider whose employees are regularly employed on the grounds or in the buildings of the Capitol complex or who have access to sensitive or critical information to submit to a fingerprint-based state and federal background inquiry through the state repository. The service provider is responsible for any costs associated with the fingerprint-based state and federal background inquiry.

After the contract for such services has been approved, but before any such employees are permitted to be on the grounds or in the buildings of the Capitol complex or have access to sensitive or critical information, the service provider shall submit a list of all persons who will be physically present and working at the Capitol complex to the Director of the Division of Protective Services for purposes of verifying compliance with this provision. The State reserves the right to prohibit a service provider's employees from accessing sensitive or critical information or to be present at the Capitol complex based upon results addressed from a criminal background check.

Service providers should contact the West Virginia Division of Protective Services by phone at (304) 558-9911 for more information.

**42. PREFERENCE FOR USE OF DOMESTIC STEEL PRODUCTS:** Except when authorized by the Director of the Purchasing Division pursuant to W. Va. Code§ SA-3-56, no contractor may use or supply steel products for a State Contract Project other than those steel products made in the United States. A contractor who uses steel products in violation of this section may be subject to civil penalties pursuant to W. Va. Code§ SA-3-56. As used in this section:

a. "State Contract Project" means any erection or construction of, or any addition to, alteration of or other improvement to any building or structure, including, but not limited to, roads or highways, or the installation of any heating or cooling or ventilating plants or other equipment, or the supply of and materials for such projects, pursuant to a contract with the State of West Virginia for which bids were solicited on or after June 6, 2001.

b. "Steel Products" means products rolled, formed, shaped, drawn, extruded, forged, cast, fabricated or otherwise similarly processed, or processed by a combination of two or more or such operations, from steel made by the open hearth, basic oxygen, electric furnace, Bessemer or other steel making process. The Purchasing Division Director may, in writing, authorize the use of foreign steel products if:

c. The cost for each contract item used does not exceed one tenth of one percent (.1%) of the total contract cost or two thousand five hundred dollars (\$2,500.00), whichever is greater. For the purposes of this section, the cost is the value of the steel product as delivered to the project; or

d. The Director of the Purchasing Division determines that specified steel materials are not produced in the United States in sufficient quantity or otherwise are not reasonably available to meet contract requirements.

**43. PREFERENCE FOR USE OF DOMESTIC ALUMINUM, GLASS, AND STEEL:** In

Accordance with W. Va. Code§ 5-19-1 et seq., and W. Va. CSR§ 148-10-1 et seq., for every contract or subcontract, subject to the limitations contained herein, for the construction, reconstruction, alteration, repair, improvement or maintenance of public works or for the purchase of any item of machinery or equipment to be used at sites of public works, only domestic aluminum, glass or steel products shall be supplied unless the spending officer determines, in writing, after the receipt of offers or bids, (1) that the cost of domestic aluminum, glass or steel products is unreasonable or inconsistent with the public interest of the State of West Virginia, (2) that domestic aluminum, glass or steel products are not produced in sufficient quantities to meet the contract requirements, or (3) the available domestic aluminum, glass, or steel do not meet the contract specifications. This provision only applies to public works contracts awarded in an amount more than fifty thousand dollars (\$50,000) or public works contracts that require more than ten thousand pounds of steel products.

The cost of domestic aluminum, glass, or steel products may be unreasonable if the cost is more than twenty percent (20%) of the bid or offered price for foreign made aluminum, glass, or steel products. If the domestic aluminum, glass or steel products to be supplied or produced in a "substantial labor surplus area", as defined by the United States Department of Labor, the cost of domestic aluminum, glass, or steel products may be unreasonable if the cost is more than thirty percent (30%) of the bid or offered price for foreign made aluminum, glass, or steel products. This preference shall be applied to an item of machinery or equipment, as indicated above, when the item is a single unit of equipment or machinery manufactured primarily of aluminum, glass or steel, is part of a public works contract and has the sole purpose or of being a permanent part of a single public works project. This provision does not apply to equipment or machinery purchased by a spending unit for use by that spending unit and not as part of a single public works project.

All bids and offers including domestic aluminum, glass or steel products that exceed bid or offer prices including foreign aluminum, glass or steel products after application of the preferences provided in this provision may be reduced to a price equal to or lower than the lowest bid or offer price for foreign aluminum, glass or steel products plus the applicable preference. If the reduced bid or offer prices are made in writing and supersede the prior bid or offer prices, all bids or offers, including the reduced bid or offer prices, will be reevaluated in accordance with this rule.

**DESIGNATED CONTACT:** Vendor appoints the individual identified in this Section as the Contract Administrator and the initial point of contact for matters relating to this Contract.

Nadia Lashmanova, RFP and Contracts Manager

(Name, Title)

(Printed Name and Title)

15353 Barranca Parkway, Irvine CA 92618

(Address)

Phone: (949) 580-1555 Fax: (949) 580-1550

(Phone Number)/ (Fax Number)

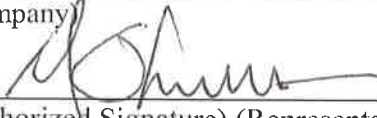
Nadia Lashmanova@nkusa.com

(email address)

**CERTIFICATION AND SIGNATURE:** By signing below, or submitting documentation through wvOASIS, I certify that I have reviewed this Solicitation in its entirety; that I understand the requirements, terms and conditions, and other information contained herein; that this bid, offer or proposal constitutes an offer to the State that cannot be unilaterally withdrawn; that the product or service proposed meets the mandatory requirements contained in the Solicitation for that product or service, unless otherwise stated herein; that the Vendor accepts the terms and conditions contained in the Solicitation, unless otherwise stated herein; that I am submitting this bid, offer or proposal for review and consideration; that I am authorized by the vendor to execute and submit this bid, offer, or proposal, or any documents related thereto on vendor's behalf; that I am authorized to bind the vendor in a contractual relationship; and that to the best of my knowledge, the vendor has properly registered with any State agency that may require registration.

Nihon Kohden America, Inc.

(Company)

 Michael Ohsawa, VP

(Authorized Signature) (Representative Name, Title)

Michael Ohsawa, Vice President of Finance

(Printed Name and Title of Authorized Representative)

1/3/2017

(Date)

Phone: (949) 580-1555 Fax: (949) 580-1550

(Phone Number) (Fax Number)

ADDENDUM ACKNOWLEDGEMENT FORM

SOLICITATION NO.: CRFQ0506WEH1100000001

Instructions: Please acknowledge receipt of all addenda issued with this solicitation by completing this addendum acknowledgment form. Check the box next to each addendum received and sign below. Failure to acknowledge addenda may result in bid disqualification.

Acknowledgment: I hereby acknowledge receipt of the following addenda and have made the necessary revisions to my proposal, plans and/or specification, etc.

Addendum Numbers Received:

*(Check the box next to each addendum received)*

- |   |  |
|---|--|
| <input type="checkbox"/> Addendum No. 1 | <input type="checkbox"/> Addendum No. 6  |
| <input type="checkbox"/> Addendum No. 2 | <input type="checkbox"/> Addendum No. 7  |
| <input type="checkbox"/> Addendum No. 3 | <input type="checkbox"/> Addendum No. 8  |
| <input type="checkbox"/> Addendum No. 4 | <input type="checkbox"/> Addendum No. 9  |
| <input type="checkbox"/> Addendum No. 5 | <input type="checkbox"/> Addendum No. 10 |

I understand that failure to confirm the receipt of addenda may be cause for rejection of this bid. I further understand that any verbal representation made or assumed to be made during any oral discussion held between Vendor's representatives and any state personnel is not binding. Only the information issued in writing and added to the specifications by an official addendum is binding.

Nihon Kohden America, Inc.

Company

Authorized Signature

Date

NOTE: This addendum acknowledgment should be submitted with the bid to expedite document processing.

**Appendix D: State of WV - Purchasing Affidavit**

STATE OF WEST VIRGINIA  
Purchasing Division

## PURCHASING AFFIDAVIT

**MANDATE:** Under W. Va. Code §5A-3-10a, no contract or renewal of any contract may be awarded by the state or any of its political subdivisions to any vendor or prospective vendor when the vendor or prospective vendor or a related party to the vendor or prospective vendor is a debtor and: (1) the debt owed is an amount greater than one thousand dollars in the aggregate; or (2) the debtor is in employer default.

**EXCEPTION:** The prohibition listed above does not apply where a vendor has contested any tax administered pursuant to chapter eleven of the W. Va. Code, workers' compensation premium, permit fee or environmental fee or assessment and the matter has not become final or where the vendor has entered into a payment plan or agreement and the vendor is not in default of any of the provisions of such plan or agreement.

### DEFINITIONS:

**"Debt"** means any assessment, premium, penalty, fine, tax or other amount of money owed to the state or any of its political subdivisions because of a judgment, fine, permit violation, license assessment, defaulted workers' compensation premium, penalty or other assessment presently delinquent or due and required to be paid to the state or any of its political subdivisions, including any interest or additional penalties accrued thereon.

**"Employer default"** means having an outstanding balance or liability to the old fund or to the uninsured employers' fund or being in policy default, as defined in W. Va. Code § 23-2c-2, failure to maintain mandatory workers' compensation coverage, or failure to fully meet its obligations as a workers' compensation self-insured employer. An employer is not in employer default if it has entered into a repayment agreement with the Insurance Commissioner and remains in compliance with the obligations under the repayment agreement.

**"Related party"** means a party, whether an individual, corporation, partnership, association, limited liability company or any other form or business association or other entity whatsoever, related to any vendor by blood, marriage, ownership or contract through which the party has a relationship of ownership or other interest with the vendor so that the party will actually or by effect receive or control a portion of the benefit, profit or other consideration from performance of a vendor contract with the party receiving an amount that meets or exceeds five percent of the total contract amount.

**AFFIRMATION:** By signing this form, the vendor's authorized signer affirms and acknowledges under penalty of law for false swearing (W. Va. Code §61-5-3) that neither vendor nor any related party owe a debt as defined above and that neither vendor nor any related party are in employer default as defined above, unless the debt or employer default is permitted under the exception above.

### WITNESS THE FOLLOWING SIGNATURE:

Vendor's Name: Nihon Kohden America, Inc.

Authorized Signature: \_\_\_\_\_

Date: 12/29/2016

State of California

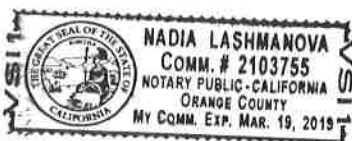
County of Orange, to-wit:

Taken, subscribed, and sworn to before me this 29 day of December, 2016.

My Commission expires March 19, 2019.

AFFIX SEAL HERE

NOTARY PUBLIC



A notary public or other officer completing this certificate verifies only the identity of the individual who signed the document to which this certificate is attached, and not the truthfulness, accuracy, or validity of that document.

Purchasing Affidavit (Revised 08/01/2015)

**Appendix E: State of WV - HIPAA Business Associate Addendum**

## WV STATE GOVERNMENT

### HIPAA BUSINESS ASSOCIATE ADDENDUM

This Health Insurance Portability and Accountability Act of 1996 (hereafter, HIPAA) Business Associate Addendum ("Addendum") is made a part of the Agreement ("Agreement") by and between the State of West Virginia ("Agency"), and Business Associate ("Associate"), and is effective as of the date of execution of the Addendum.

The Associate performs certain services on behalf of or for the Agency pursuant to the underlying Agreement that requires the exchange of information including protected health information protected by the Health Insurance Portability and Accountability Act of 1996 ("HIPAA"), as amended by the American Recovery and Reinvestment Act of 2009 (Pub. L. No. 111-5) (the "HITECH Act"), any associated regulations and the federal regulations published at 45 CFR parts 160 and 164 (sometimes collectively referred to as "HIPAA"). The Agency is a "Covered Entity" as that term is defined in HIPAA, and the parties to the underlying Agreement are entering into this Addendum to establish the responsibilities of both parties regarding HIPAA-covered information and to bring the underlying Agreement into compliance with HIPAA.

Whereas it is desirable, in order to further the continued efficient operations of Agency to disclose to its Associate certain information which may contain confidential individually identifiable health information (hereafter, Protected Health Information or PHI); and

Whereas, it is the desire of both parties that the confidentiality of the PHI disclosed hereunder be maintained and treated in accordance with all applicable laws relating to confidentiality, including the Privacy and Security Rules, the HITECH Act and its associated regulations, and the parties do agree to at all times treat the PHI and interpret this Addendum consistent with that desire.

NOW THEREFORE: the parties agree that in consideration of the mutual promises herein, in the Agreement, and of the exchange of PHI hereunder that:

1. **Definitions.** Terms used, but not otherwise defined, in this Addendum shall have the same meaning as those terms in the Privacy, Security, Breach Notification, and Enforcement Rules at 45 CFR Part 160 and Part 164.
  - a. **Agency Procurement Officer** shall mean the appropriate Agency individual listed at: <http://www.state.wv.us/admin/purchase/vrc/agencyli.html>.
  - b. **Agent** shall mean those person(s) who are agent(s) of the Business Associate, in accordance with the Federal common law of agency, as referenced in 45 CFR § 160.402(c).
  - c. **Breach** shall mean the acquisition, access, use or disclosure of protected health information which compromises the security or privacy of such information, except as excluded in the definition of Breach in 45 CFR § 164.402.
  - d. **Business Associate** shall have the meaning given to such term in 45 CFR § 160.103.
  - e. **HITECH Act** shall mean the Health Information Technology for Economic and Clinical Health Act. Public Law No. 111-05. 111<sup>th</sup> Congress (2009).



- f. **Privacy Rule** means the Standards for Privacy of Individually Identifiable Health Information found at 45 CFR Parts 160 and 164.
- g. **Protected Health Information or PHI** shall have the meaning given to such term in 45 CFR § 160.103, limited to the information created or received by Associate from or on behalf of Agency.
- h. **Security Incident** means any known successful or unsuccessful attempt by an authorized or unauthorized individual to inappropriately use, disclose, modify, access, or destroy any information or interference with system operations in an information system.
- i. **Security Rule** means the Security Standards for the Protection of Electronic Protected Health Information found at 45 CFR Parts 160 and 164.
- j. **Subcontractor** means a person to whom a business associate delegates a function, activity, or service, other than in the capacity of a member of the workforce of such business associate.

## 2. Permitted Uses and Disclosures.

- a. **PHI Described.** This means PHI created, received, maintained or transmitted on behalf of the Agency by the Associate. This PHI is governed by this Addendum and is limited to the minimum necessary, to complete the tasks or to provide the services associated with the terms of the original Agreement, and is described in Appendix A.
- b. **Purposes.** Except as otherwise limited in this Addendum, Associate may use or disclose the PHI on behalf of, or to provide services to, Agency for the purposes necessary to complete the tasks, or provide the services, associated with, and required by the terms of the original Agreement, or as required by law, if such use or disclosure of the PHI would not violate the Privacy or Security Rules or applicable state law if done by Agency or Associate, or violate the minimum necessary and related Privacy and Security policies and procedures of the Agency. The Associate is directly liable under HIPAA for impermissible uses and disclosures of the PHI it handles on behalf of Agency.
- c. **Further Uses and Disclosures.** Except as otherwise limited in this Addendum, the Associate may disclose PHI to third parties for the purpose of its own proper management and administration, or as required by law, provided that (i) the disclosure is required by law, or (ii) the Associate has obtained from the third party reasonable assurances that the PHI will be held confidentially and used or further disclosed only as required by law or for the purpose for which it was disclosed to the third party by the Associate; and, (iii) an agreement to notify the Associate and Agency of any instances of which it (the third party) is aware in which the confidentiality of the information has been breached. To the extent practical, the information should be in a limited data set or the minimum necessary information pursuant to 45 CFR § 164.502, or take other measures as necessary to satisfy the Agency's obligations under 45 CFR § 164.502.

### 3. Obligations of Associate.

- a. **Stated Purposes Only.** The PHI may not be used by the Associate for any purpose other than as stated in this Addendum or as required or permitted by law.
- b. **Limited Disclosure.** The PHI is confidential and will not be disclosed by the Associate other than as stated in this Addendum or as required or permitted by law. Associate is prohibited from directly or indirectly receiving any remuneration in exchange for an individual's PHI unless Agency gives written approval and the individual provides a valid authorization. Associate will refrain from marketing activities that would violate HIPAA, including specifically Section 13406 of the HITECH Act. Associate will report to Agency any use or disclosure of the PHI, including any Security Incident not provided for by this Agreement of which it becomes aware.
- c. **Safeguards.** The Associate will use appropriate safeguards, and comply with Subpart C of 45 CFR Part 164 with respect to electronic protected health information, to prevent use or disclosure of the PHI, except as provided for in this Addendum. This shall include, but not be limited to:
  - i. Limitation of the groups of its workforce and agents, to whom the PHI is disclosed to those reasonably required to accomplish the purposes stated in this Addendum, and the use and disclosure of the minimum PHI necessary or a Limited Data Set;
  - ii. Appropriate notification and training of its workforce and agents in order to protect the PHI from unauthorized use and disclosure;
  - iii. Maintenance of a comprehensive, reasonable and appropriate written PHI privacy and security program that includes administrative, technical and physical safeguards appropriate to the size, nature, scope and complexity of the Associate's operations, in compliance with the Security Rule;
  - iv. In accordance with 45 CFR §§ 164.502(e)(1)(ii) and 164.308(b)(2), if applicable, ensure that any subcontractors that create, receive, maintain, or transmit protected health information on behalf of the business associate agree to the same restrictions, conditions, and requirements that apply to the business associate with respect to such information.
- d. **Compliance With Law.** The Associate will not use or disclose the PHI in a manner in violation of existing law and specifically not in violation of laws relating to confidentiality of PHI, including but not limited to, the Privacy and Security Rules.
- e. **Mitigation.** Associate agrees to mitigate, to the extent practicable, any harmful effect that is known to Associate of a use or disclosure of the PHI by Associate in violation of the requirements of this Addendum, and report its mitigation activity back to the Agency.

f. **Support of Individual Rights.**

- i. **Access to PHI.** Associate shall make the PHI maintained by Associate or its agents or subcontractors in Designated Record Sets available to Agency for inspection and copying, and in electronic format, if requested, within ten (10) days of a request by Agency to enable Agency to fulfill its obligations under the Privacy Rule, including, but not limited to, 45 CFR § 164.524 and consistent with Section 13405 of the HITECH Act.
- ii. **Amendment of PHI.** Within ten (10) days of receipt of a request from Agency for an amendment of the PHI or a record about an individual contained in a Designated Record Set, Associate or its agents or subcontractors shall make such PHI available to Agency for amendment and incorporate any such amendment to enable Agency to fulfill its obligations under the Privacy Rule, including, but not limited to, 45 CFR § 164.526.
- iii. **Accounting Rights.** Within ten (10) days of notice of a request for an accounting of disclosures of the PHI, Associate and its agents or subcontractors shall make available to Agency the documentation required to provide an accounting of disclosures to enable Agency to fulfill its obligations under the Privacy Rule, including, but not limited to, 45 CFR § 164.528 and consistent with Section 13405 of the HITECH Act. Associate agrees to document disclosures of the PHI and information related to such disclosures as would be required for Agency to respond to a request by an individual for an accounting of disclosures of PHI in accordance with 45 CFR § 164.528. This should include a process that allows for an accounting to be collected and maintained by Associate and its agents or subcontractors for at least six (6) years from the date of disclosure, or longer if required by state law. At a minimum, such documentation shall include:
  - the date of disclosure;
  - the name of the entity or person who received the PHI, and if known, the address of the entity or person;
  - a brief description of the PHI disclosed; and
  - a brief statement of purposes of the disclosure that reasonably informs the individual of the basis for the disclosure, or a copy of the individual's authorization, or a copy of the written request for disclosure.
- iv. **Request for Restriction.** Under the direction of the Agency, abide by any individual's request to restrict the disclosure of PHI, consistent with the requirements of Section 13405 of the HITECH Act and 45 CFR § 164.522, when the Agency determines to do so (except as required by law) and if the disclosure is to a health plan for payment or health care operations and it pertains to a health care item or service for which the health care provider was paid in full "out-of-pocket."
- v. **Immediate Discontinuance of Use or Disclosure.** The Associate will immediately discontinue use or disclosure of Agency PHI pertaining to any individual when so requested by Agency. This includes, but is not limited to, cases in which an individual has withdrawn or modified an authorization to use or disclose PHI.

- g. **Retention of PHI.** Notwithstanding section 4.a. of this Addendum, Associate and its subcontractors or agents shall retain all PHI pursuant to state and federal law and shall continue to maintain the PHI required under Section 3.f. of this Addendum for a period of six (6) years after termination of the Agreement, or longer if required under state law.
- h. **Agent's, Subcontractor's Compliance.** The Associate shall notify the Agency of all subcontracts and agreements relating to the Agreement, where the subcontractor or agent receives PHI as described in section 2.a. of this Addendum. Such notification shall occur within 30 (thirty) calendar days of the execution of the subcontract and shall be delivered to the Agency Procurement Officer. The Associate will ensure that any of its subcontractors, to whom it provides any of the PHI it receives hereunder, or to whom it provides any PHI which the Associate creates or receives on behalf of the Agency, agree to the restrictions and conditions which apply to the Associate hereunder. The Agency may request copies of downstream subcontracts and agreements to determine whether all restrictions, terms and conditions have been flowed down. Failure to ensure that downstream contracts, subcontracts and agreements contain the required restrictions, terms and conditions may result in termination of the Agreement.
- j. **Federal and Agency Access.** The Associate shall make its internal practices, books, and records relating to the use and disclosure of PHI, as well as the PHI, received from, or created or received by the Associate on behalf of the Agency available to the U.S. Secretary of Health and Human Services consistent with 45 CFR § 164.504. The Associate shall also make these records available to Agency, or Agency's contractor, for periodic audit of Associate's compliance with the Privacy and Security Rules. Upon Agency's request, the Associate shall provide proof of compliance with HIPAA and HITECH data privacy/protection guidelines, certification of a secure network and other assurance relative to compliance with the Privacy and Security Rules. This section shall also apply to Associate's subcontractors, if any.
- k. **Security.** The Associate shall take all steps necessary to ensure the continuous security of all PHI and data systems containing PHI. In addition, compliance with 74 FR 19006 Guidance Specifying the Technologies and Methodologies That Render PHI Unusable, Unreadable, or Indecipherable to Unauthorized Individuals for Purposes of the Breach Notification Requirements under Section 13402 of Title XIII is required, to the extent practicable. If Associate chooses not to adopt such methodologies as defined in 74 FR 19006 to secure the PHI governed by this Addendum, it must submit such written rationale, including its Security Risk Analysis, to the Agency Procurement Officer for review prior to the execution of the Addendum. This review may take up to ten (10) days.
- l. **Notification of Breach.** During the term of this Addendum, the Associate shall notify the Agency and, unless otherwise directed by the Agency in writing, the WV Office of Technology immediately by e-mail or web form upon the discovery of any Breach of unsecured PHI; or within 24 hours by e-mail or web form of any suspected Security Incident, intrusion or unauthorized use or disclosure of PHI in violation of this Agreement and this Addendum, or potential loss of confidential data affecting this Agreement. Notification shall be provided to the Agency Procurement Officer at [www.state.wv.us/admin/purchase/vrc/agencyli.htm](http://www.state.wv.us/admin/purchase/vrc/agencyli.htm) and,



unless otherwise directed by the Agency in writing, the Office of Technology at [incident@wv.gov](mailto:incident@wv.gov) or <https://apps.wv.gov/ot/ir/Default.aspx>.

The Associate shall immediately investigate such Security Incident, Breach, or unauthorized use or disclosure of PHI or confidential data. Within 72 hours of the discovery, the Associate shall notify the Agency Procurement Officer, and, unless otherwise directed by the Agency in writing, the Office of Technology of: (a) Date of discovery; (b) What data elements were involved and the extent of the data involved in the Breach; (c) A description of the unauthorized persons known or reasonably believed to have improperly used or disclosed PHI or confidential data; (d) A description of where the PHI or confidential data is believed to have been improperly transmitted, sent, or utilized; (e) A description of the probable causes of the improper use or disclosure; and (f) Whether any federal or state laws requiring individual notifications of Breaches are triggered.

Agency will coordinate with Associate to determine additional specific actions that will be required of the Associate for mitigation of the Breach, which may include notification to the individual or other authorities.

All associated costs shall be borne by the Associate. This may include, but not be limited to costs associated with notifying affected individuals.

If the Associate enters into a subcontract relating to the Agreement where the subcontractor or agent receives PHI as described in section 2.a. of this Addendum, all such subcontracts or downstream agreements shall contain the same incident notification requirements as contained herein, with reporting directly to the Agency Procurement Officer. Failure to include such requirement in any subcontract or agreement may result in the Agency's termination of the Agreement.

- m. **Assistance in Litigation or Administrative Proceedings.** The Associate shall make itself and any subcontractors, workforce or agents assisting Associate in the performance of its obligations under this Agreement, available to the Agency at no cost to the Agency to testify as witnesses, or otherwise, in the event of litigation or administrative proceedings being commenced against the Agency, its officers or employees based upon claimed violations of HIPAA, the HIPAA regulations or other laws relating to security and privacy, which involves inaction or actions by the Associate, except where Associate or its subcontractor, workforce or agent is a named as an adverse party.

#### 4. Addendum Administration.

- a. **Term.** This Addendum shall terminate on termination of the underlying Agreement or on the date the Agency terminates for cause as authorized in paragraph (c) of this Section, whichever is sooner.
- b. **Duties at Termination.** Upon any termination of the underlying Agreement, the Associate shall return or destroy, at the Agency's option, all PHI received from, or created or received by the Associate on behalf of the Agency that the Associate still maintains in any form and retain no copies of such PHI or, if such return or destruction is not feasible, the Associate shall extend the protections of this Addendum to the PHI and limit further uses and disclosures to the purposes that make the return or destruction of the PHI infeasible. This shall also apply to all agents and subcontractors of Associate. The duty of the Associate and its agents

AGREED:

Name of Agency: Welch Community Hospital

Name of Associate: Nihon Kohden America, Inc.

Signature: \_\_\_\_\_

Signature: 


Title: C.E.O.

Michael Ohsawa  
Title: Vice President of Finance

Date: \_\_\_\_\_

Date: 12/29/2016

Form - WVBAA-012004  
Amended 06.26.2013

APPROVED AS TO FORM THIS 26th  
DAY OF Dec 20 13  
BY   
Patrick Morrissey  
Attorney General

## Appendix A

(To be completed by the Agency's Procurement Officer prior to the execution of the Addendum, and shall be made a part of the Addendum. PHI not identified prior to execution of the Addendum may only be added by amending Appendix A and the Addendum, via Change Order.)

Name of Associate: \_\_\_\_\_

Name of Agency: WVDHHR/BHHFF/Welch Community Hospital

Describe the PHI (do not include any actual PHI). If not applicable, please indicate the same.

Any and all personally identifiable information including but not limited to patient name, address, date of birth, Social Security Number, telephone number, and insurance information.

Any and all protected health information including but not limited to patient diagnosis, lab test, radiological exams, physical health exams, and/or treatment procedures.

**Appendix F: State of WV - Provisions Required for Federally Funded Procurements**



## Provisions Required for Federally Funded Procurements

1. **Federal Funds:** This purchase is being funded in whole or in part with Federal Funds and is subject to the requirements established in 2 CFR § 200. Pursuant to 2 CFR § 200.317 the provisions of 2 CFR §§ 200.322 and 200.326 are expressly included in this solicitation below and incorporated into any contract resulting from this solicitation by reference.
2. **2 CFR §200.322 Procurement of recovered materials:** A non-Federal entity that is a state agency or agency of a political subdivision of a state and its contractors must comply with section 6002 of the Solid Waste Disposal Act, as amended by the Resource Conservation and Recovery Act. The requirements of Section 6002 include procuring only items designated in guidelines of the Environmental Protection Agency (EPA) at 40 CFR part 247 that contain the highest percentage of recovered materials practicable, consistent with maintaining a satisfactory level of competition, where the purchase price of the item exceeds \$10,000 or the value of the quantity acquired during the preceding fiscal year exceeded \$10,000; procuring solid waste management services in a manner that maximizes energy and resource recovery; and establishing an affirmative procurement program for procurement of recovered materials identified in the EPA guidelines.
3. **§200.326 Contract provisions:** Pursuant to the requirements contained in 2 CFR §§ 200.317 and 200.326, the following provisions are included any contract resulting from this solicitation, to the extent that the provisions are applicable.
  - (A) At a minimum, the administrative, contractual, or legal remedies contained in W. Va. CSR § 148-1-5 and the applicable definitions contained in W. Va. CSR § 148-1-2 apply to any contract resulting from this solicitation in instances where contractors violate or breach contract terms for contracts for more than the simplified acquisition threshold currently set at \$150,000 (which is the inflation adjusted amount determined by the Civilian Agency Acquisition Council and the Defense Acquisition Regulations Council (Councils) as authorized by 41 U.S.C. 1908).,

West Virginia Code of State Rules § 148-1-5 states:

### **§ 148-1-5. Remedies.**

5.1. The Director may require that the spending unit attempt to resolve any issues that it may have with the vendor prior to pursuing a remedy contained herein. The spending unit must document any resolution efforts and provide copies of those documents to the Purchasing Division.

5.2. Contract Cancellation.

5.2.a. Cancellation. The Director may cancel a purchase or contract immediately under any one of the following conditions including, but not limited to:

5.2.a.1. The vendor agrees to the cancellation;

5.2.a.2. The vendor has obtained the contract by fraud, collusion, conspiracy, or is in conflict with any statutory or constitutional provision of the State of West Virginia;

5.2.a.3. Failure to honor any contractual term or condition or to honor standard commercial practices;

5.2.a.4. The existence of an organizational conflict of interest is identified;

5.2.a.5. Funds are not appropriated or an appropriation is discontinued by the legislature for the acquisition.

5.2.a.6. Violation of any federal, state, or local law, regulation, or ordinance.

5.2.b. The Director may cancel a purchase or contract for any reason or no reason, upon providing the vendor with 30 days' notice of the cancellation.

5.2.c. Opportunity to Cure. In the event that a vendor fails to honor any contractual term or condition, or violates any provision of federal, state, or local law, regulation, or ordinance, the Director may request that the vendor remedy the contract breach or legal violation within a time frame the Director determines to be appropriate. If the vendor fails to remedy the contract breach or legal violation or the Director determines, at his or her sole discretion, that such a request is unlikely to yield a satisfactory result, then he or she may cancel immediately without providing the vendor an opportunity to perform a remedy.

5.2.d. Re-Award. The Director may award the cancelled contract to the next lowest responsible bidder (or next highest scoring bidder if best value procurement) without a subsequent solicitation if the following conditions are met:

5.2.d.1. The next lowest responsible bidder (or next highest scoring bidder if best value procurement) is able to perform at the price contained in its original bid submission, and

5.2.d.2. The contract is an open-end contract, a one-time purchase contract, or a contract for work which has not yet commenced.

Award to the next lowest responsible bidder (or next highest scoring bidder if best value procurement) will not be an option if the vendor's failure has in any way increased or significantly changed the scope of the original contract. The vendor failing to honor contractual and legal obligations is responsible for any increase in cost the state incurs as a result of the re-award.

5.3. Non-Responsible. If the Director believes that a vendor may be non-responsible, the Director may request that a vendor or spending unit provide evidence that the vendor either does or does not have the capability to fully perform the contract requirements, and the integrity and reliability necessary to assure good faith performance. If the Director determines that the vendor is non-responsible, the Director shall reject that vendor's bid and shall not award the contract to that vendor. A determination of non-responsibility must be evaluated on a case-by-case basis and can only be made after the vendor in question has submitted a bid. A determination of non-responsibility will only extend to the contract for which the vendor has submitted a bid and does not operate as a bar against submitting future bids.

#### 5.4. Suspension.

5.4.a. The Director may suspend, for a period not to exceed one (1) year, the right of a vendor to bid on procurements issued by the Purchasing Division or any state spending unit under its authority if:

5.4.a.1. The vendor has exhibited a pattern of submitting bids and then requesting that its bid be withdrawn after bids have been publicly opened. For purposes of this provision, a pattern is two or more instances in any 12 month period.

5.4.a.2. The vendor has exhibited a pattern of poor performance in fulfilling his or her contractual obligations to the State. Poor performance includes, but is not limited to, two or more instances of any of the following: violations of law, regulation, or ordinance; failure to deliver timely; failure to deliver quantities ordered; poor performance reports; and failure to deliver commodities, services, or printing at the quality level required by the contract.

5.4.a.3. The vendor has breached a contract issued by the Purchasing Division or any state spending unit under its authority and refuses to remedy that breach.

5.4.a.4. The vendor's actions have given rise to one or more of the grounds for debarment listed in section 5A-3-33d.

5.4.b. Vendor suspension for the reasons listed in section 5.4 above shall occur as follows:

5.4.b.1. Upon a determination by the Director that a suspension is warranted, the Director will serve a notice of suspension to the vendor.

5.4.b.2. A notice of suspension must inform the vendor:

5.4.b.2.A. Of the grounds for the suspension;

5.4.b.2.B. Of the duration of the suspension;

5.4.b.2.C. Of the right to request a hearing contesting the suspension;

5.4.b.2.D. That a request for a hearing must be served on the Director no later than five (5) working days of the vendor's receipt of the notice of suspension;

5.4.b.2.E. That the vendor's failure to request a hearing no later than five (5) working days of the receipt of the notice of suspension will be deemed a waiver of the right to a hearing and result in the automatic enforcement of the suspension without further notice or an opportunity to respond; and

5.4.b.2.F. That a request for a hearing must include an explanation of why the vendor believes the Director's asserted grounds for suspension do not apply and why the vendor should not be suspended.

5.4.b.3. A vendor's failure to serve a request for hearing on the Director no later than five (5) working days of the vendor's receipt of the notice of suspension will be deemed a waiver of the right to a hearing and may result in the automatic enforcement of the suspension without further notice or an opportunity to respond. 5.4.b.4. A vendor who files a timely request for hearing but nevertheless fails to provide an explanation of why the asserted grounds for suspension are inapplicable or should not result in a suspension, may result in a denial of the vendor's hearing request.

5.4.b.5. Within five (5) working days of receiving the vendor's request for a hearing, the Director will serve on the vendor a notice of hearing that includes the date, time and place of the hearing.

5.4.b.6. The hearing will be recorded and an official record prepared. Within ten (10) working days of the conclusion of the hearing, the Director will issue and serve on the vendor, a written decision either confirming or reversing the suspension.

5.4.c. A vendor may appeal a decision of the Director to the Secretary of Administration. The appeal must be in writing and served on the Secretary no later than five (5) working days of receipt of the Director's decision.

5.4.d. The Secretary, or his or her designee, will schedule an appeal hearing and serve on the vendor, a notice of hearing that includes the date, time and place of the hearing. The appeal hearing will be recorded and an official record prepared. Within ten (10) working days of the conclusion of the appeal hearing, the Secretary will issue and serve on the vendor a written decision either confirming or reversing the suspension.

5.4.e. Any notice or service related to suspension actions or proceedings must be provided by certified mail, return receipt requested.

5.5. Vendor Debarment. The Director may debar a vendor on the basis of one or more of the grounds for debarment contained in West Virginia Code § 5A-3-33d or if the vendor has been declared ineligible to participate in procurement related activities under federal laws and regulation.

5.5.a. Debarment proceedings shall be conducted in accordance with West Virginia Code § 5A-3-33e and these rules. A vendor that has received notice of the proposed debarment by certified mail, return receipt requested, must respond to the proposed debarment within 30 working days after receipt of notice or the debarment will be instituted without further notice. A vendor is deemed to have received notice, notwithstanding the vendor's failure to accept the certified mail, if the letter is addressed to the vendor at its last known address. After considering the matter and reaching a decision, the Director shall notify the vendor of his or her decision by certified mail, return receipt requested.

5.5.b. Any vendor, other than a vendor prohibited from participating in federal procurement, undergoing debarment proceedings is permitted to continue participating in the state's procurement process until a final debarment decision has been reached. Any contract that a debarred vendor obtains prior to a final debarment decision shall remain in effect for the current term, but may not be extended or renewed. Notwithstanding the foregoing, the Director may cancel a contract held by a debarred vendor if the Director determines, in his or her sole discretion, that doing so is in the best interest of the State. A vendor prohibited from participating in federal procurement will not be permitted to participate in the state's procurement process during debarment proceedings.

5.5.c. If the Director's final debarment decision is that debarment is warranted and notice of the final debarment decision is mailed, the Purchasing Division shall reject any bid submitted by the debarred vendor,

including any bid submitted prior to the final debarment decision if that bid has not yet been accepted and a contract consummated. 5.5.d. Pursuant to West Virginia Code section 5A-3-33e(e), the length of the debarment period will be specified in the debarment decision and will be for a period of time that the Director finds necessary and proper to protect the public from an irresponsible vendor.

5.5.e. List of Debarred Vendors. The Director shall maintain and publicly post a list of debarred vendors on the Purchasing Division's website.

#### 5.6. Damages.

5.6.a. A vendor who fails to perform as required under a contract shall be liable for actual damages and costs incurred by the state.

5.6.b. If any commodities delivered under a contract have been used or consumed by a spending unit and on testing the commodities are found not to comply with specifications, no payment may be approved by the Spending Unit for the merchandise until the amount of actual damages incurred has been determined.

5.6.c. The Spending Unit shall seek to collect damages by following the procedures established by the Office of the Attorney General for the collection of delinquent obligations.

**(B)** At a minimum, the termination for cause and for convenience provisions contained in W. Va. CSR § 148-1-5.2 and the applicable definitions contained in W. Va. CSR § 148-1-2 apply to any contract in excess of \$10,000 resulting from this solicitation.

West Virginia Code of State Rules § 148-1-5.2 states:

#### 5.2. Contract Cancellation.

5.2.a. Cancellation. The Director may cancel a purchase or contract immediately under any one of the following conditions including, but not limited to:

5.2.a.1. The vendor agrees to the cancellation;

5.2.a.2. The vendor has obtained the contract by fraud, collusion, conspiracy, or is in conflict with any statutory or constitutional provision of the State of West Virginia;

5.2.a.3. Failure to honor any contractual term or condition or to honor standard commercial practices;

5.2.a.4. The existence of an organizational conflict of interest is identified;

5.2.a.5. Funds are not appropriated or an appropriation is discontinued by the legislature for the acquisition.

5.2.a.6. Violation of any federal, state, or local law, regulation, or ordinance.

5.2.b. The Director may cancel a purchase or contract for any reason or no reason, upon providing the vendor with 30 days' notice of the cancellation.

5.2.c. Opportunity to Cure. In the event that a vendor fails to honor any contractual term or condition, or violates any provision of federal, state, or local law, regulation, or ordinance, the Director may request that the vendor remedy the contract breach or legal violation within a time frame the Director determines to be appropriate. If the vendor fails to remedy the contract breach or legal violation or the Director determines, at his or her sole discretion, that such a request is unlikely to yield a satisfactory result, then he or she may cancel immediately without providing the vendor an opportunity to perform a remedy.

**(C) Equal Employment Opportunity.** Except as otherwise provided under 41 CFR Part 60, all contracts that meet the definition of “**federally assisted construction contract**” in 41 CFR Part 60–1.3 must include the equal opportunity clause provided under 41 CFR 60–1.4(b), in accordance with Executive Order 11246, “Equal Employment Opportunity” (30 FR 12319, 12935, 3 CFR Part, 1964–1965 Comp., p. 339), as amended by Executive Order 11375, “Amending Executive Order 11246 Relating to Equal Employment Opportunity,” and implementing regulations at 41 CFR part 60, “Office of Federal Contract Compliance Programs, Equal Employment Opportunity, Department of Labor.”

41 CFR § 60-1.3 defines “Federally assisted construction contract” as any agreement or modification thereof between any applicant and a person for construction work which is paid for in whole or in part with funds obtained from the Government or borrowed on the credit of the Government pursuant to any Federal program involving a grant, contract, loan, insurance, or guarantee, or undertaken pursuant to any Federal program involving such grant, contract, loan, insurance, or guarantee, or any application or modification thereof approved by the Government for a grant, contract, loan, insurance, or guarantee under which the applicant itself participates in the construction work.

Accordingly, to the extent that this contract meets the definition of a “federally assisted construction contract” under 41 CFR Part 60-1.3, the following clause is included:

**41 CFR 60-1.4 - Equal opportunity clause. (b) *Federally assisted construction contracts.***

In accordance with the requirements of described above, and except as otherwise provided in the applicable regulations, the following language is hereby incorporated into any contract resulting from this solicitation involving federally assisted construction which is not exempt from the requirements of the equal opportunity clause:

The applicant hereby agrees that it will incorporate or cause to be incorporated into any contract for construction work, or modification thereof, as defined in the regulations of the Secretary of Labor at 41 CFR Chapter 60, which is paid for in whole or in part with funds obtained from the Federal Government or borrowed on the credit of the Federal Government pursuant to a grant, contract, loan insurance, or guarantee, or undertaken pursuant to any Federal program involving such grant, contract, loan, insurance, or guarantee, the following equal opportunity clause:

During the performance of this contract, the contractor agrees as follows:

- (1) The contractor will not discriminate against any employee or applicant for employment because of race, color, religion, sex, or national origin. The contractor will take affirmative action to ensure that applicants are employed, and that employees are treated during employment without regard to their race, color, religion, sex, or national origin. such action shall include, but not be limited to the following: Employment, upgrading, demotion, or transfer; recruitment or recruitment advertising; layoff or termination; rates of pay or other forms of compensation; and selection for training, including apprenticeship. The contractor agrees to post in conspicuous places, available to employees and applicants for employment, notices to be provided setting forth the provisions of this nondiscrimination clause.
- (2) The contractor will, in all solicitations or advertisements for employees placed by or on behalf of the contractor, state that all qualified applicants will receive considerations for employment without regard to race, color, religion, sex, or national origin.



- (3) The contractor will send to each labor union or representative of workers with which he has a collective bargaining agreement or other contract or understanding, a notice to be provided advising the said labor union or workers' representatives of the contractor's commitments under this section, and shall post copies of the notice in conspicuous places available to employees and applicants for employment.
- (4) The contractor will comply with all provisions of Executive Order 11246 of September 24, 1965, and of the rules, regulations, and relevant orders of the Secretary of Labor.
- (5) The contractor will furnish all information and reports required by Executive Order 11246 of September 24, 1965, and by rules, regulations, and orders of the Secretary of Labor, or pursuant thereto, and will permit access to his books, records, and accounts by the administering agency and the Secretary of Labor for purposes of investigation to ascertain compliance with such rules, regulations, and orders.
- (6) In the event of the contractor's noncompliance with the nondiscrimination clauses of this contract or with any of the said rules, regulations, or orders, this contract may be canceled, terminated, or suspended in whole or in part and the contractor may be declared ineligible for further Government contracts or federally assisted construction contracts in accordance with procedures authorized in Executive Order 11246 of September 24, 1965, and such other sanctions may be imposed and remedies invoked as provided in Executive Order 11246 of September 24, 1965, or by rule, regulation, or order of the Secretary of Labor, or as otherwise provided by law.
- (7) The contractor will include the portion of the sentence immediately preceding paragraph (1) and the provisions of paragraphs (1) through (7) in every subcontract or purchase order unless exempted by rules, regulations, or orders of the Secretary of Labor issued pursuant to section 204 of Executive Order 11246 of September 24, 1965, so that such provisions will be binding upon each subcontractor or vendor. The contractor will take such action with respect to any subcontract or purchase order as the administering agency may direct as a means of enforcing such provisions, including sanctions for noncompliance: *Provided, however,* That in the event a contractor becomes involved in, or is threatened with, litigation with a subcontractor or vendor as a result of such direction by the administering agency the contractor may

request the United States to enter into such litigation to protect the interests of the United States.

The applicant further agrees that it will be bound by the above equal opportunity clause with respect to its own employment practices when it participates in federally assisted construction work: *Provided*, That if the applicant so participating is a State or local government, the above equal opportunity clause is not applicable to any agency, instrumentality or subdivision of such government which does not participate in work on or under the contract.

The applicant agrees that it will assist and cooperate actively with the administering agency and the Secretary of Labor in obtaining the compliance of contractors and subcontractors with the equal opportunity clause and the rules, regulations, and relevant orders of the Secretary of Labor, that it will furnish the administering agency and the Secretary of Labor such information as they may require for the supervision of such compliance, and that it will otherwise assist the administering agency in the discharge of the agency's primary responsibility for securing compliance.

The applicant further agrees that it will refrain from entering into any contract or contract modification subject to Executive Order 11246 of September 24, 1965, with a contractor debarred from, or who has not demonstrated eligibility for, Government contracts and federally assisted construction contracts pursuant to the Executive order and will carry out such sanctions and penalties for violation of the equal opportunity clause as may be imposed upon contractors and subcontractors by the administering agency or the Secretary of Labor pursuant to Part II, Subpart D of the Executive order. In addition, the applicant agrees that if it fails or refuses to comply with these undertakings, the administering agency may take any or all of the following actions: Cancel, terminate, or suspend in whole or in part this grant (contract, loan, insurance, guarantee); refrain from extending any further assistance to the applicant under the program with respect to which the failure or refund occurred until satisfactory assurance of future compliance has been received from such applicant; and refer the case to the Department of Justice for appropriate legal proceedings.

**(D) Davis-Bacon Act, as amended (40 U.S.C.3141–3148).** Any construction contract resulting from this solicitation hereby requires compliance with the Davis-Bacon Act (40 U.S.C.3141–3144, and 3146–3148) as supplemented by Department of Labor regulations (29 CFR Part 5, “Labor

Standards Provisions Applicable to Contracts Covering Federally Financed and Assisted Construction”). In accordance with the statute, contractors are required to pay wages to laborers and mechanics at a rate not less than the prevailing wages specified in a wage determination made by the Secretary of Labor. In addition, contractors are required to pay wages not less than once a week.

Any construction contract resulting from this solicitation hereby requires compliance with the Copeland “Anti-Kickback” Act (40 U.S.C. 3145), as supplemented by Department of Labor regulations (29 CFR Part 3, “Contractors and Subcontractors on Public Building or Public Work Financed in Whole or in Part by Loans or Grants from the United States”). The Act provides that each contractor or subrecipient are prohibited from inducing, by any means, any person employed in the construction, completion, or repair of public work, to give up any part of the compensation to which he or she is otherwise entitled.

**(E) Contract Work Hours and Safety Standards Act (40 U.S.C. 3701–3708).** Where applicable, any contract resulting from this solicitation in excess of \$100,000 that involve the employment of mechanics or laborers hereby requires compliance with 40 U.S.C. 3702 and 3704, as supplemented by Department of Labor regulations (29 CFR Part 5). Under 40 U.S.C. 3702 of the Act, each contractor is required to compute the wages of every mechanic and laborer on the basis of a standard work week of 40 hours. Work in excess of the standard work week is permissible provided that the worker is compensated at a rate of not less than one and a half times the basic rate of pay for all hours worked in excess of 40 hours in the work week. The requirements of 40 U.S.C. 3704 are applicable to construction work and provide that no laborer or mechanic must be required to work in surroundings or under working conditions which are unsanitary, hazardous or dangerous. These requirements do not apply to the purchases of supplies or materials or articles ordinarily available on the open market, or contracts for transportation or transmission of intelligence.

**(F) Rights to Inventions Made Under a Contract or Agreement.** If the Federal award meets the definition of “funding agreement” under 37 CFR § 401.2 (a) and the recipient or subrecipient wishes to enter into a contract with a small business firm or nonprofit organization regarding the substitution of parties, assignment or performance of experimental, developmental, or research work under that “funding agreement,” the recipient or subrecipient must comply with the requirements of 37 CFR Part 401, “Rights to Inventions Made by Nonprofit Organizations and Small Business Firms Under Government Grants, Contracts and Cooperative Agreements,” and any implementing regulations issued by the awarding agency.

**(G) Clean Air Act (42 U.S.C. 7401–7671q.) and the Federal Water Pollution Control Act (33 U.S.C. 1251–1387), as amended—** Any contract resulting from this solicitation in excess of \$150,000 hereby requires compliance with all applicable standards, orders or regulations issued pursuant to **the Clean Air Act (42 U.S.C. 7401–7671q.)** and the Federal Water Pollution Control Act as amended (**33 U.S.C.1251–1387**).

**(H) Debarment and Suspension (Executive Orders 12549 and 12689)—** Any contract resulting from this solicitation will not be awarded to parties listed on the government wide Excluded Parties List System in the System for Award Management (SAM), in accordance with the OMB guidelines at 2 CFR 180 that implement Executive Orders 12549 (3 CFR Part 1986 Comp., p. 189) and 12689 (3 CFR Part 1989 Comp., p. 235), “Debarment and Suspension.”

**(I) Byrd Anti-Lobbying Amendment (31 U.S.C. 1352)—** Any contract resulting from this solicitation requires compliance with the Byrd Anti-Lobbying Amendment (31 U.S.C. 1352). Contractors that apply or bid for an award of \$100,000 or more must file the required certification. Each tier certifies to the tier above that it will not and has not used Federal appropriated funds to pay any person or organization for influencing or attempting to influence an officer or employee of any agency, a member of Congress, officer or employee of Congress, or an employee of a member of Congress in connection with obtaining any Federal contract, grant or any other award covered by 31 U.S.C. 1352. Each tier must also disclose any lobbying with non-Federal funds that takes place in connection with obtaining any Federal award. Such disclosures are forwarded from tier to tier up to the non-Federal award.

## **Appendix G: Nihon Kohden Product Literature**

# Central Monitoring System CNS-6201A



## Patient Monitoring and Review Capabilities

- Delivering information throughout the continuum of care
- Scalable solution to meet any monitoring requirement
- Monitors up to 32 patients using two displays
- Combines hardwired, wireless and telemetry monitoring into a single solution
- Comprehensive data storage and review
- Automated patient and data transfer between multiple departments insuring a comprehensive patient record
- Export data to Hospital Information System using CGS-9002 HL7 Gateway System

# Specifications

## Central Monitoring System

### CNS-6201A

#### CNS-6201A

##### DISPLAY

<b>Size/Type:</b>	24" color LCD display with touch screen operation
<b>Resolution:</b>	1920 x 1200
<b>Number of Patients:</b>	Up to 32 with two displays. 4, 6, 8, 10, 12 or 16 patients per display, selectable
<b>Waveform Display Items (depends on the connected monitor/transmitter):</b>	ECG (up to 12 vectors), IBP (1-8), respiration wave, pulse (SpO <sub>2</sub> ), EEG (1-2), Flow/Paw, CO <sub>2</sub> , external input, Anesthetic gas (O <sub>2</sub> , CO <sub>2</sub> , N <sub>2</sub> O, Agent)
<b>Number of Traces, All Beds Screen:</b>	Up to 24 total per display, number per patient is based on number of patients displayed.  16 patients – 2 traces each, 12 patients – 3 traces each, 10 patients – 4 traces each, 8 patients – 5 traces each, 6 patients – 8 traces each, 4 patients – 12 traces each, 2 patients – 16 traces each
<b>Number of Traces, Individual Bed Screen:</b>	Up to 16
<b>Waveform Sweep Speed:</b>	25 mm/s, 50 mm/s, 6.25 mm/s (respiration measurement)
<b>Alphanumeric Display Items (depends on the connected monitor/transmitter):</b>	Heart rate, Pulse rate, VPC rate, respiration rate, ST level, IBP (systolic, diastolic, mean), SpO <sub>2</sub> , CO <sub>2</sub> , Cardiac Output, blood temperature, CCO, CCO<Tb>, CCI, NIBP (systolic, diastolic, mean), temperature, SvO <sub>2</sub> , PiCCO, Flow/Paw, N <sub>2</sub> O, O <sub>2</sub> , Agent, BIS, tcPO <sub>2</sub> , tcPCO <sub>2</sub> , TV, MV, PEEP, others.

##### ALARMS

<b>Alarm Type:</b>	Crisis, Warning, Advisory, Technical
<b>Alarm Items (depends on the connected monitor/transmitter):</b>	Vital signs: Heart rate, Pulse rate, Respiration rate, Apnea, ST level, IBP (systolic, diastolic, and mean), NIBP (systolic, diastolic, and mean), Temperature, Delta T, Tb, SpO <sub>2</sub> , SvO <sub>2</sub> , CCO, ventilator, anesthetic gas, BIS, EtCO <sub>2</sub> , FiCO <sub>2</sub> , EtO <sub>2</sub> , FiO <sub>2</sub> , N <sub>2</sub> O, O <sub>2</sub> , tcPO <sub>2</sub> , tcPCO <sub>2</sub> , MV, Ppeak, PEEP  Arrhythmia: Asystole, V.Fib, Ext. Tachycardia, Ext. Bradycardia, V. Tachy, Tachycardia, Bradycardia, VPC Run, Couplet, Early VPC, Multiform, Bigeminy, Freq. VPC, Prolonged
<b>Alarm Display:</b>	Alarm indicator with flashing bed frame and highlighted numerical display and highlighted alarm message
<b>Alarm Recording:</b>	Automatic
<b>Alarm Icon/Arrhythmia Icon:</b>	Available when vital sign, technical alarm, or arrhythmia occurs

##### DATA STORAGE

<b>Graphical Trend:</b>	120 hours, all parameters
<b>Tabular Trends:</b>	120 hours, all parameters, minute-by-minute
<b>Arrhythmia Recall:</b>	1,500 events per bed with 8 second strip.
<b>Full Disclosure:</b>	120 hours, 16 traces per bed
<b>ST Level:</b>	120 hours, minute-by-minute
<b>Hemodynamic List:</b>	256 files per bed
<b>12-lead ECG Analysis Files:</b>	200 files per bed
<b>Event History:</b>	10,000 events per bed, includes arrhythmia events, limit alarms, technical alarms, system alarms, caliper measurements and comments

##### OVERVIEW

Displays user-selectable vital signs, up to 12 ECG waveforms, reviews, alarm events, and status messages associated with the selected overview bed. The overview bed can be any bed in the network that the CNS is not monitoring.

##### THERMAL ARRAY RECORDER, WS-960P

<b>Recording Method:</b>	Thermal array recording
<b>Number of Waveforms:</b>	3
<b>Paper Speed:</b>	25 mm/sec
<b>Type of Recording:</b>	Manual, alarm, periodic, remote

##### NETWORK LASER PRINTER

HP LaserJet M602DN or equivalent (Postscript printer)

<b>Number of Waveforms:</b>	Up to 16
<b>Type of Recording:</b>	Manual, periodic

##### USER INTERFACE

Touch screen, mouse, keyboard and wireless remote controller

##### POWER REQUIREMENTS

<b>Line/Battery Voltage:</b>	AC 100 to 240 V, 50 or 60 Hz
<b>Power Consumption:</b>	180 VA or less

##### ENVIRONMENT

<b>Operating Temperature:</b>	10° to 35°C
<b>Storage Temperature:</b>	-20° to 60°C VL-931R (-10° to 60°C)
<b>Operating Humidity:</b>	30 to 80 % RH
<b>Storage Humidity:</b>	20 to 90 % RH
<b>Operating Atmospheric Pressure:</b>	70 to 106 kPa
<b>Storage Atmospheric Pressure:</b>	70 to 106 kPa

##### DIMENSIONS AND WEIGHT

<b>PU-971R Main Unit:</b>	4.5" W x 13.8" H x 15.0" D, 24.2 lbs
<b>E282678 LCD Unit:</b>	23.4" W x 15.7" H x 8.4" D, 24.2 lbs
<b>WS-960P Recorder:</b>	3.2" W x 2.9" H x 6.7" D, 1.6 lbs

# Remote Network Station RNS-9703



## Secondary Patient Monitoring and Review Capabilities

- Effectively access and review clinically relevant patient data from multiple locations with diverse hardwired and telemetry monitoring environments
- Intuitive, real-time management of monitored data from locations other than the traditional central station
- Ability to arrange the 16 patient display by care area, acuity level and monitoring type
- Focuses staff attention on key information that can help speed interpretation and improve outcomes
- Enhancing access to care, safety, clinician workflow and patient satisfaction



# Specifications

## Remote Network Station RNS-9703

### RNS-9703-19 and RNS-9703-24

#### DISPLAY

<b>Size/Type:</b>	19" or 24" color LCD display
<b>Resolution:</b>	1920 x 1200
<b>Number of Patients:</b>	4, 6, 8, 10, 12 or 16 patients per display
<b>Waveform Display Items (depends on the connected monitor/transmitter):</b>	ECG (up to 12 vectors), IBP (1-8), respiration wave, pulse (SpO <sub>2</sub> ), EEG (1-2), Flow/Paw, CO <sub>2</sub> , external input, Anesthetic gas (O <sub>2</sub> , CO <sub>2</sub> , N <sub>2</sub> O, Agent)
<b>Number of Traces, All Beds Screen:</b>	Up to 24 total per display, number per patient is based on number of patients displayed.  16 patients – 1 trace each, 12 patients – 2 traces each, 10 patients – 2 traces each, 8 patients – 3 traces each, 6 patients – 4 traces each, 4 patients – 6 traces each
<b>Number of Traces, Individual Bed Screen:</b>	Up to 16
<b>Waveform Sweep Speed:</b>	25 mm/s, 50 mm/s, 6.25 mm/s (respiration measurement)
<b>Alphanumeric Display Items (depends on the connected monitor/transmitter):</b>	Heart rate, Pulse rate, VPC rate, respiration rate, ST level, IBP (systolic, diastolic, mean), SpO <sub>2</sub> , CO <sub>2</sub> , Cardiac Output, blood temperature, CCO, CCO<Tb>, CCI, NIBP (systolic, diastolic, mean), temperature, SvO <sub>2</sub> , PiCCO, Flow/Paw, N <sub>2</sub> O, O <sub>2</sub> , Agent, BIS, tcPCO <sub>2</sub> , tvPCO <sub>2</sub> , TV, MV, PEEP, others.

#### ALARMS

<b>Alarm Type:</b>	Crisis, Warning, Advisory, Technical
<b>Alarm Items (depends on the connected monitor/transmitter):</b>	Vital signs: Heart rate, Pulse rate, Respiration rate, Apnea, ST level, IBP (systolic, diastolic, and mean), NIBP (systolic, diastolic, and mean), Temperature, Delta T, Tb, SpO <sub>2</sub> , SvO <sub>2</sub> , CCO, ventilator, anesthetic gas, BIS, EtCO <sub>2</sub> , FiCO <sub>2</sub> , EtO <sub>2</sub> , FiO <sub>2</sub> , N <sub>2</sub> O, O <sub>2</sub> , tcPO <sub>2</sub> , tcPCO <sub>2</sub> , MV, Ppeak, PEEP  Arrhythmia: Asystole, V.Fib, Ext. Tachycardia, Ext. Bradycardia, V. Tachy, Tachycardia, Bradycardia, VPC Run, Couplet, Early VPC, Multiform, Bigeminy, Freq. VPC, Prolonged
<b>Alarm Display:</b>	Alarm indicator with flashing bed frame and highlighted numerical display and highlighted alarm message
<b>Alarm Recording:</b>	Automatic (option)
<b>Alarm Icon/Arrhythmia Icon:</b>	Available when vital sign, technical alarm, or arrhythmia occurs

#### OVERVIEW FUNCTION

Displays user-selectable vital signs, up to 12 ECG waveforms, reviews, alarm events, and status messages associated with the selected overview bed. The overview bed can be any bed in the network that the RNS is not monitoring.

#### THERMAL ARRAY RECORDER, WS-960P (OPTION)

<b>Recording Method:</b>	Thermal array recording
<b>Number of Waveforms:</b>	3
<b>Paper Speed:</b>	25 mm/sec
<b>Type of Recording:</b>	Manual, alarm, periodic, remote

#### NETWORK LASER PRINTER (OPTION)

HP LaserJet M602DN or equivalent (Postscript printer)

<b>Number of Waveforms:</b>	Up to 16
<b>Type of Recording:</b>	Manual, periodic

#### USER INTERFACE

Mouse and keyboard

#### RNS-9703 19" THIN CLIENT COMPUTER

<b>Dimensions:</b>	407 x 452.9 x 210 mm / 16 x 17.8 x 8.2 inches
<b>Weight:</b>	5 Kg / 11 lbs.
<b>Power Consumption:</b>	100-240V, 50/60Hz, 0.5A
<b>Operating Temperature:</b>	50°F ~ 104°F (10°C ~ 40°C)
<b>Operating Humidity:</b>	10 % ~ 80 %, non-condensing
<b>Storage Temperature:</b>	-4°F ~ 113°F (-20°C ~ 45°C)
<b>Storage Humidity:</b>	5 % ~ 95 %, non-condensing RNS-9703-019

#### RNS-9703 24" THIN CLIENT COMPUTER

<b>Dimensions:</b>	554.6 x 510.3 x 224 mm / 21.8 x 20 x 8.8 inches
<b>Weight:</b>	6.1 Kg / 13.4 lbs.
<b>Power Consumption:</b>	100-240V, 50/60Hz, 0.5A
<b>Operating Temperature:</b>	50°F ~ 104°F (10°C ~ 40°C)
<b>Operating Humidity:</b>	10 % ~ 80 %, non-condensing
<b>Storage Temperature:</b>	-4°F ~ 113°F (-20°C ~ 45°C)
<b>Storage Humidity:</b>	5 % ~ 95 %, non-condensing RNS-9703-024

# Bridging the Care Continuum

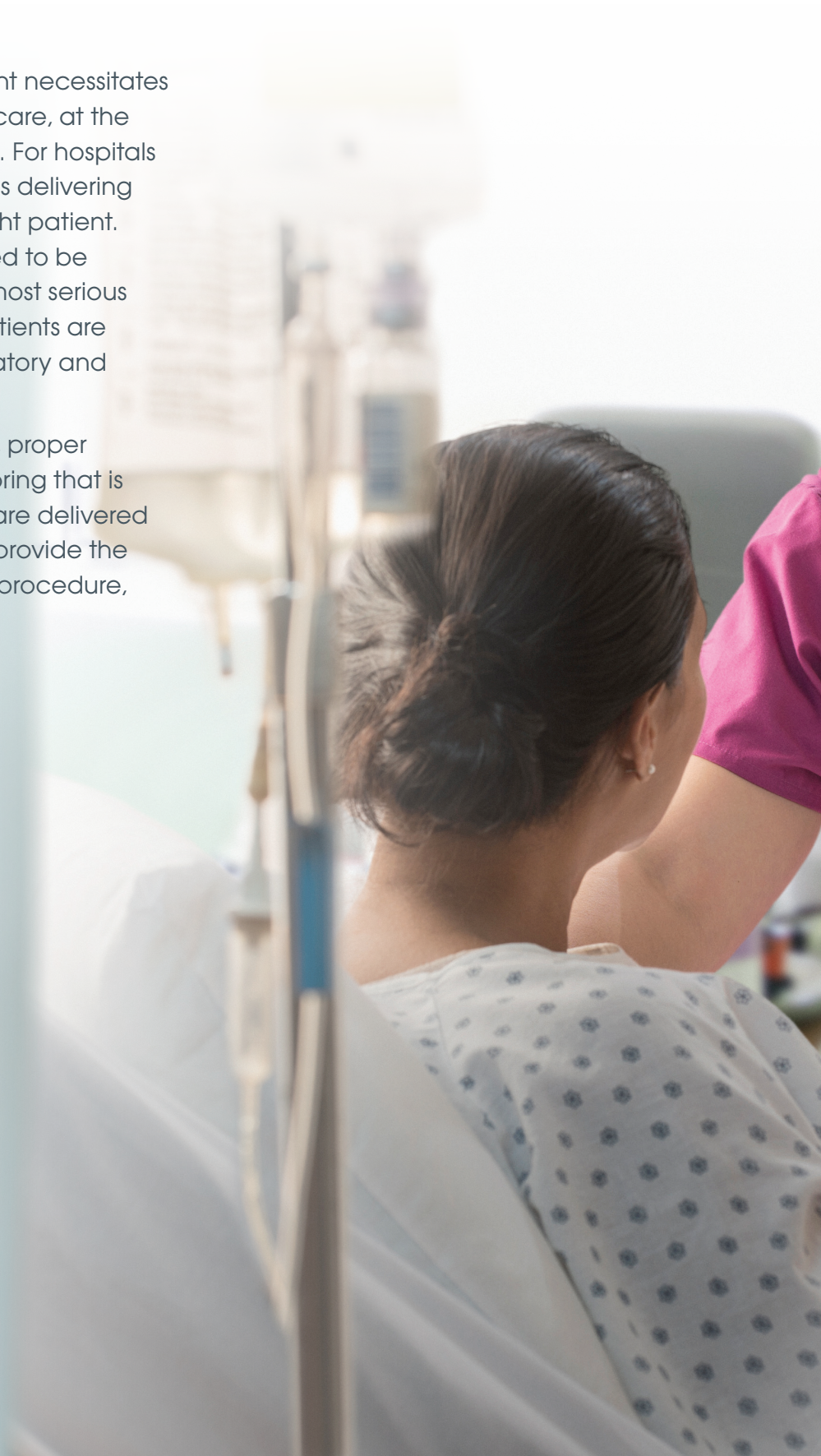
BSM-3500 Series  
bedside monitors



# The Right Monitoring

Today's healthcare environment necessitates that patients receive the right care, at the right cost, and at the right time. For hospitals and health systems, that means delivering the right level of care to the right patient. Valuable high acuity beds need to be reserved for patients with the most serious health concerns, and more patients are receiving care through ambulatory and specialty surgery centers.

Regardless of the environment, proper monitoring of patients – monitoring that is designed specifically for the care delivered – ensures that you are able to provide the highest quality of care for any procedure, treatment or test.





# in the Right Setting

At Nihon Kohden, we understand the importance of monitoring at every acuity level, so we have developed the BSM-3500, the latest addition to our portfolio of patient monitoring solutions to address your needs. Built to meet the unique needs of hospitals and health systems that offer a continuum of integrated care, the BSM-3500 delivers on Nihon Kohden's commitment to setting the industry standard in quality and reliability.

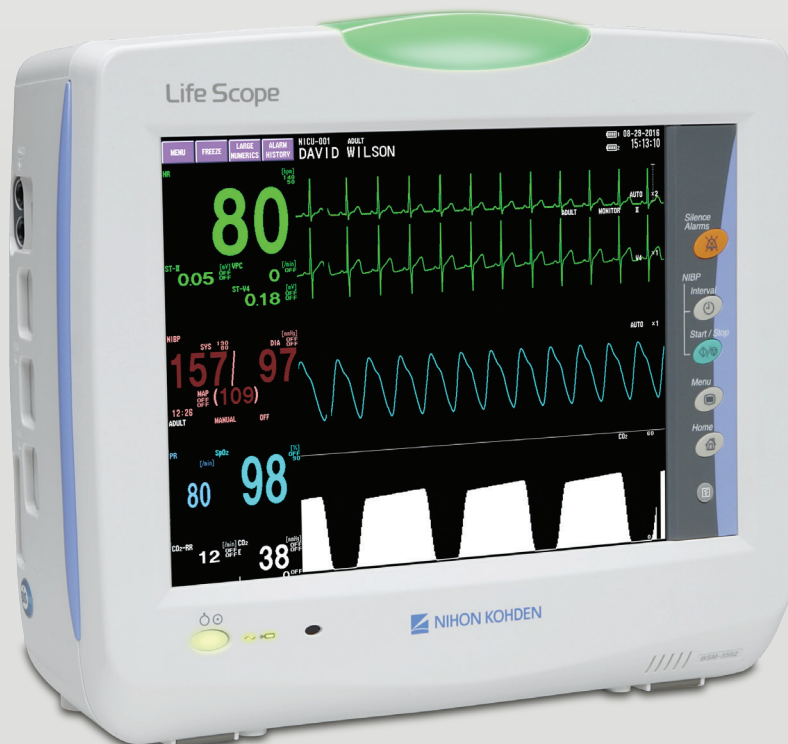


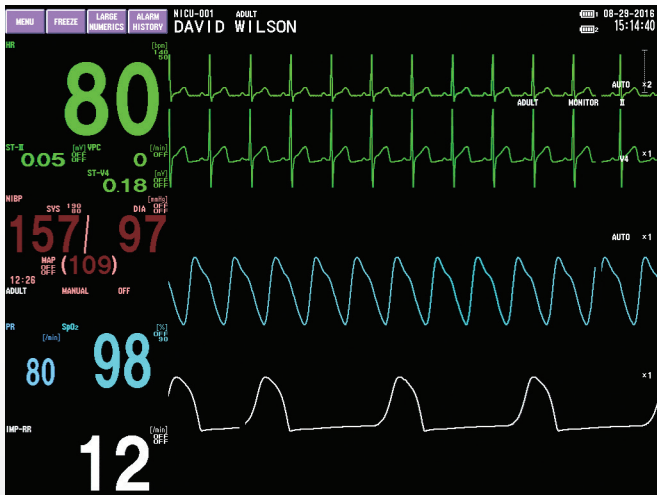
# Low Acuity with High Standards

The BSM-3500 was designed based on Nihon Kohden's premium-as-standard philosophy which is the belief that every piece of equipment should be fully appointed with all features – both standard and premium – unlocked and ready to use at a moment's notice. This ensures that our technology can be employed in the broadest range of acuity levels and seamlessly transition between care areas as patient need dictates.

Developed to provide quality vital signs monitoring without compromise

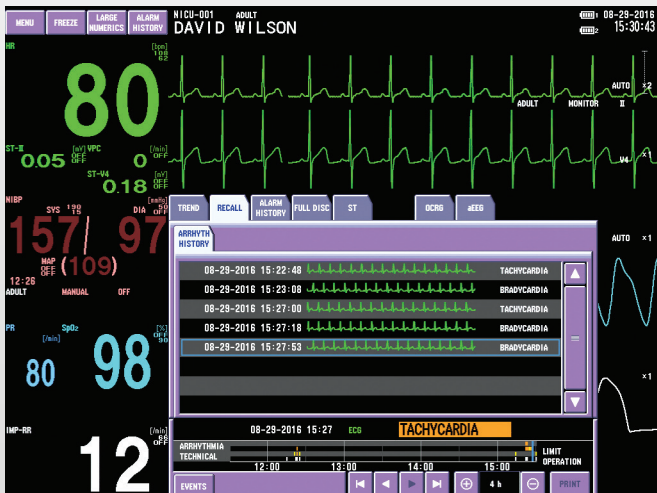
- Compact configured monitor with intuitive touchscreen user interface
- ECG, Respiration, SpO<sub>2</sub>, IBP, NIBP, dual temperature and 3 channel recorder capability
- Comprehensive arrhythmia detection and recall, including advanced Atrial Fibrillation algorithm
- ST segment analysis as well as diagnostic 12-lead ECG capability
- Central Station, external device interface and EMR compatibility





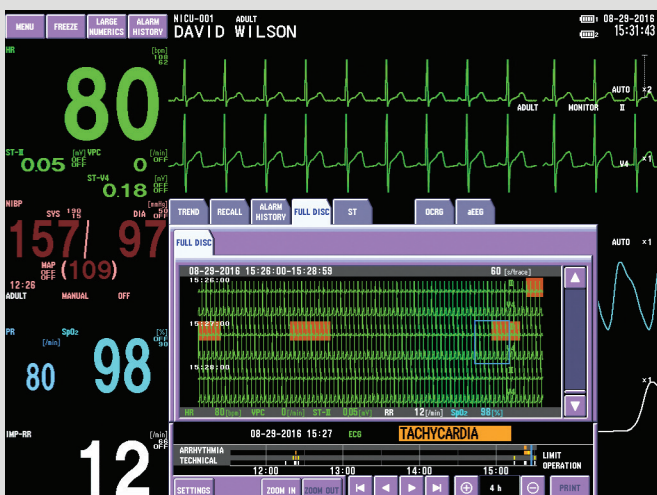
## Intuitive Multi-Parameter Monitoring

The compact portable BSM-3500 offers reliable full featured monitoring that serves patients across specialty care areas.



## Arrhythmia

The BSM-3500 provides high accuracy multi-lead arrhythmia detection and storage of over 16,000 arrhythmia events. Each event is time-linked to the full-disclosure waveforms to determine what led up to, and what followed, the captured event.



## Full Disclosure

Full disclosure waveforms allow you to validate alarm and numeric findings to make treatment decisions based on more accurate monitored data. The BSM-3500 provides storage and review capabilities at the bedside monitor that are typically found only in a central station.

## Offers Parameter Flexibility with Smart Cable™ System

Nihon Kohden's unique Smart Cable technology miniaturizes circuits found in traditional modules and embeds that circuitry into a Smart Patient Cable. When you plug a Smart Cable into a Multiport, the associated parameter is automatically detected, displayed and measured. This technology, provides seamless and immediate access to dual SpO<sub>2</sub>, EtCO<sub>2</sub>, blood pressure, temperature, BIS and more, when and where you need it for rapid clinical assessment across care areas.



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## cap-ONE® Increases Mainstream CO<sub>2</sub> Accuracy for Non-intubated and Intubated Patients

Nihon Kohden's cap-ONE CO<sub>2</sub> sensor is the world's first wearable, mainstream CO<sub>2</sub> sensor for non-intubated patients. The unique airway adapter catches both oral and nasal expired CO<sub>2</sub> for increased accuracy.

The cap-ONE mainstream sensor for intubated patients measures CO<sub>2</sub> partial pressure in inspiration and expiration. Its fast warm up time and anti-fogging airway adaptor ensure precise readings when you need it.





# Streamlined EMR Integration to Ensure Coordinated Patient Care

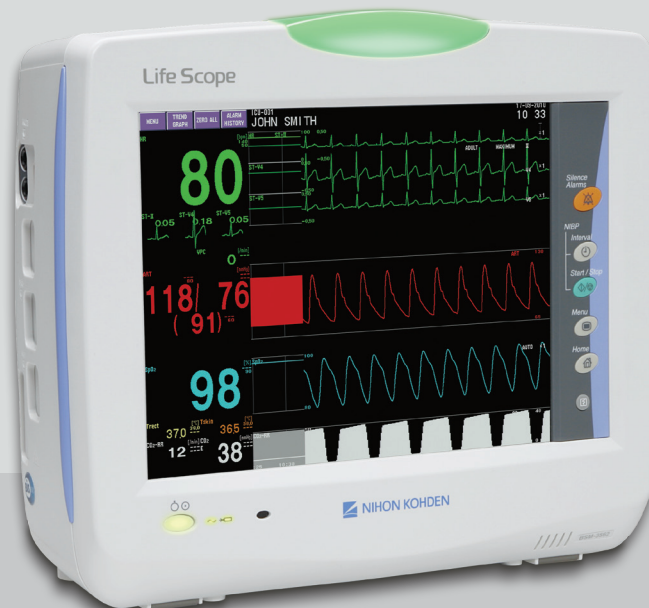
As with all Nihon Kohden monitoring systems, the BSM-3500 is designed to seamlessly integrate with electronic medical records systems. Our IT solutions are developed jointly with your team to interface with another vendor's equipment, providing a single connection for integration. Implementation is designed to ensure hardware and software compatibility into the future.





# Bedside Monitor

## BSM-3500



### Quality Vital Sign Monitoring

- Compact, configured monitor with touchscreen display for ease of operation
- Ideal for ambulatory and specialty surgery centers
- Premium-as-standard design, providing all software options with base model
- Multiple Smart Cable™ ports for optimal parameter flexibility
- Comprehensive storage of multiple parameters to guide treatment decisions, including:
  - Arrhythmia detection and recall
  - ST analysis and recall
  - cap-ONE® Mainstream CO<sub>2</sub> sensor for non-intubated patients
  - Tabular and graphical trends
  - Full disclosure waveforms
  - Diagnostic 12-lead ECG

# Specifications

## Bedside Monitor BSM-3500

### BSM-3500

#### DISPLAY

<b>Display Size:</b>	12.1" color TFT type LCD
<b>Display Characteristics:</b>	Resolution: 800 x 600. Touch screen with six quick access hard keys
<b>Maximum Number of Waveform Traces:</b>	Up to 14 traces
<b>Display Waveforms:</b>	ECG (up to 12), respiration, IBP (up to 2), SpO <sub>2</sub> pulse wave, CO <sub>2</sub> , BIS EEG (up to 2 traces), vent PAW, vent Flow, and CO Thermodilution curve. When gas is monitored: O <sub>2</sub> concentration curve, CO <sub>2</sub> concentration curve, anesthetic agent concentration (Halothane, Isoflurane, Enflurane, Sevoflurane, Desflurane) Analog input

#### Numerical Data Display:

Heart rate, VPC rate, ST level, RR respiration rate, NIBP (systolic, diastolic, mean), IBP (systolic, diastolic, mean), SpO<sub>2</sub>, SpO<sub>2</sub>-2, delta SpO<sub>2</sub>, pulse rate, temperature, CO, Cl, Ti (injectate temperature), Tb (blood temperature), O<sub>2</sub> concentration, EtCO<sub>2</sub>, BIS, inspired/ expired N<sub>2</sub>O concentration, inspired/ expired CO<sub>2</sub>, inspired/ expired O<sub>2</sub> concentration, inspired/ expired anesthetic agent concentration (Halothane, Isoflurane, Enflurane, Sevoflurane, Desflurane), MAC (minimum alveolar concentration), Ppeak (peak airway pressure), PEEP (positive end expiratory pressure), Pmean (mean airway pressure), MV (minute volume), TVi (inspiratory tidal volume), TVe (expiratory tidal volume), C (compliance), R (airway resistance), Ri (inspiratory airway resistance), Re (expiratory airway resistance), I:E (inspiration expiration ratio), SEF (90 or 95% spectral edge frequency), MDF (median frequency), PPF (peak power frequency), TP (total power), TP power of frequency, TOF, CCO, SVRI, SvO<sub>2</sub>, EF, ScvO<sub>2</sub>, CCI, EDV, SVR, EDVI, PCCO, PCCI, tcPO<sub>2</sub>, tcPCO<sub>2</sub>, PPV, SPV

#### ALARMS

<b>Alarm Items:</b>	Vital sign alarms, arrhythmia alarms, technical alarms and operational alarms
<b>Alarm Levels:</b>	Crisis (red blinking), Warning (yellow blinking), Advisory (yellow or blue light)
<b>Alarm Indication:</b>	Alarm indicator (360° visibility) highlighted message, alarm sound
<b>Alarm Suspend:</b>	1, 2, or 3 min

#### PARAMETERS

<b>ECG:</b>	Number of ECG waveforms channels: up to 12 Frequency response: Diagnosis mode: 0.05 to 150 Hz Monitor mode: 0.3 to 40 Hz Maximum filter mode: 1 to 18 Hz Heart Rate Counting range: 0, 15 to 300 beats/min Arrhythmia Analysis method: Multi-template software algorithm VPC counting rate: 0 to 99 VPCs/min Arrhythmia alarms: ASYSTOLE, VF, VT, V RHYTHM, V BRADY, EXT TACHY, EXT BRADY, AF, VPC RUN, COUPLET, EARLY VPC, BIGEMINY, TRIGEMINY, FREQ VPC, PROLONGED RR, SV TACHY, TACHYCARDIA, BRADYCARDIA, VPC, MULTIFORM, IRREGULAR RR, NO PACER PULSE, PACER NON-CAPTURE, PAUSE
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<b>ST Level Measurement:</b>	Number of measurement channels: up to 12 Measuring range: $\pm 2.5$ mV
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#### Respiration (Impedance or Thermistor Method):

Measuring range: 0 to 150 breaths/min

<b>SpO<sub>2</sub>:</b>	Measuring Technology: Nihon Kohden, Masimo or Nellcor Measuring Display Range: 0 to 100% (70 to 100% at specified accuracy) Pulse rate from SpO <sub>2</sub> Range: 0, 30 to 300 beats/min (varies by SpO <sub>2</sub> technology)
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<b>Non Invasive Blood Pressure, NIBP:</b>	Measuring method: Oscillometric Cuff Pressure display range: 0 to 300 mmHg
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<b>Invasive Blood Pressure, IBP:</b>	Measuring range: -50 to 300 mmHg Pulse rate display range from IBP range: 30 to 300 beats/min
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<b>Temperature:</b>	Measuring range: 0 to 45°C Number of channels: 2 with Delta Temp
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<b>Cardiac Output:</b>	Measuring method: Thermodilution method Measuring range: Injectate temperature (Ti): 0°C to 27°C Blood temperature (Tb): 15°C to 45°C Thermodilution curve (delta Tb): 0°C to 2.5°C Cardiac output (CO): 0.5 to 20 L/min
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<b>Inspired Oxygen Fractional Concentration:</b>	Measuring range: 10 to 100%
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<b>CO<sub>2</sub>:</b>	CO <sub>2</sub> measuring range: 0 to 150 mmHg Respiration rate counting range: 0 to 150 breaths/min
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<b>BIS:</b>	Input channels: 2 Measuring parameters: Bispectral Index (BIS), 95% Spectral Edge Frequency (SEF90, SEF95), Suppression Ratio (SR), EMG, Signal Quality Index (SQI)
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#### STORED PATIENT DATA

<b>Trendgraph:</b>	Trend parameters: All monitored parameters Trend display time: Up to 72 hours
<b>Vital Signs List:</b>	All monitored parameters for up to 72 hours (1 per minute for 72 hours)
<b>NIBP:</b>	Number of entries: 1,024 files
<b>HEMO List:</b>	Number of entries: 1,024 files
<b>Full Disclosure:</b>	Storage time: Up to 72 hours Number of Waveforms stored: 5 maximum
<b>ST Recall:</b>	Number of files: 4,320 files (1 per minute for 72 hours) for all monitoring leads
<b>Alarm History:</b>	Number of entries: 16,384 files
<b>Arrhythmia Recall:</b>	Number of files: 16,384 files
<b>12-Lead Interpretive Recall:</b>	Number of files: 18 files
<b>OCRG:</b>	Storage capacity: 72 hours

#### RECORDER (option)

<b>Recording Method:</b>	Thermal array recording
<b>Number of Channels:</b>	3 traces (maximum)

#### POWER REQUIREMENT

<b>AC:</b>	100 to 240 V $\pm 10\%$
<b>Line Frequency:</b>	50 or 60 Hz
<b>Battery Operation Time (option):</b>	Up to 90 minutes
<b>Power Consumption:</b>	AC 100 VA

#### DIMENSIONS AND WEIGHT

<b>Dimensions:</b>	370 W x 310 H x 172 D mm
<b>Weight:</b>	6.2kg

Smart Cable is a Trademark of Nihon Kohden Corporation.

# Rethinking Telemetry— and Its Impact on Healthcare

Wireless technology that  
improves care and  
reduces costs



# Thinking differently about telemetry.

You know it better than anyone—the challenge of improving quality while controlling costs is still with us—and telemetry is one area where this challenge has a dramatic impact both on patients and hospitals.

At Nihon Kohden, we're thinking differently about telemetry. Consider this:

What if you could monitor your at-risk patients throughout the facility and in the process improve care

and reduce costs? And what if monitoring of your at-risk patients knew no bounds? With our family of multi-parameter telemetry products you could simultaneously watch over all patients, including those with cardiac conditions and co-morbidities, such as sleep apnea, obesity, and patients on opioid drips located in medical/surgical units.

Now you can.

Nihon Kohden offers the industry's most robust telemetry technology, bringing you immediate clinical and financial benefits.





# Advanced telemetry for at-risk monitoring

It's vital that clinicians be able to quickly and accurately assess and document their patients' condition, in real time.

The Nihon Kohden CNS-6201 is an advanced telemetry system with the following features:

## Enhanced User Interface

Features direct-access keys to clinical information.

## Fully Customizable

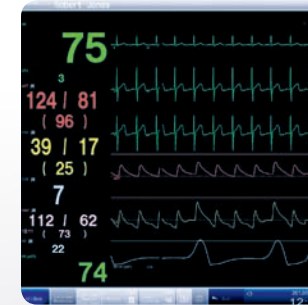
Clinicians can customize screens with a few simple keystrokes, enabling them to view the data they need, in the format they want.

## Scalable

The system can accommodate up to 32 patients.

Better, faster assessment of patient information on a larger scale.

Clinicians can perform important assessment-related functions:



Individual patient review



Menu of review screens



Full-disclosure review



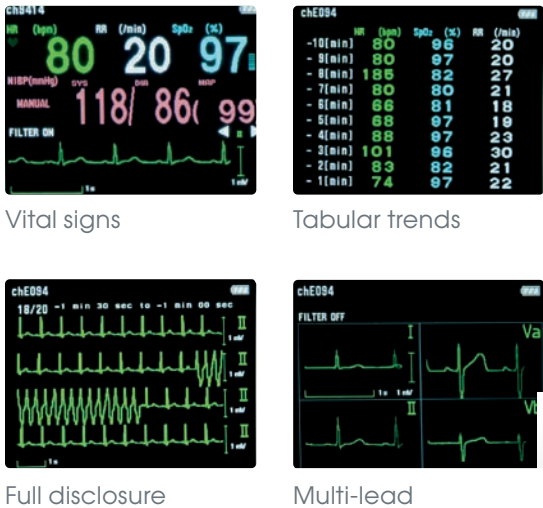
Customization of review screens





# The industry's most robust line of transmitters

Nihon Kohden's telemetry transmitters are ideal for patients that require ambulatory monitoring, from the traditional cardiac telemetry units to the medical/surgical floors. We have the right transmitter for the entire patient population regardless of acuity level or location.



# Monitors and displays:

NTX/ZM-540/541PA



Monitors ECG (3 or 6 lead), respiration, continuous SpO2, and NIBP  
 Battery life: 24 hours with NIBP at 1 hour intervals

ZM-530/531PA



Monitors ECG (3 or 6 lead), respiration, and continuous SpO2  
 Battery life: 60 hours

ZM-520/521PA



Monitors ECG (3 or 6 lead) and respiration  
 Battery life: 72 hours

# The benefits of Defensive Monitoring

It's clear that earlier detection of patient distress results in faster intervention and higher patient safety. Yet, continuous patient monitoring typically takes place only in areas where patients are deemed most at risk, such as ICU and cardiac telemetry. Defensive Monitoring provides continuous vital sign surveillance to the traditionally un-monitored, at-risk patient located in the medical/surgical units.

## A new algorithm for patient monitoring

The Nihon Kohden Defensive Monitoring strategy includes the Prefense® Early Detection and Notification System.™ Our fifth-generation Prefense system features an FDA-cleared smoothing algorithm, providing a more accurate representation of a patient's condition. With Prefense, surveillance is both constant and efficient. Caregivers immediately get the vital information they need to determine the status of their patient—resulting in faster interventions when required, while reducing false alarms by more than 75 percent.



Monitored Parameters:  
 Heart Rate, Pulse Oximetry, Respiration, Non-Invasive Blood Pressure, EtCO2

## The advantages are significant:

- Enhanced and reliable point of care surveillance
- Decrease unplanned and costly ICU and cardiac telemetry admissions
- Better bed utilization while reducing length of stay

Prefense can immediately help hospitals meet their dual challenge of increasing quality while cutting costs.

# Different thinking to address today's challenges

Faced with the challenge of improving care quality—while controlling costs—healthcare providers seek business partners who enable real change. Who think differently.

At the forefront of change within the healthcare continuum, Nihon Kohden is uniquely suited to empower providers to meet these challenges and surpass patient quality and safety initiatives. Nihon Kohden provides quality, reliable technology, and drives integration at the clinical level, across all care areas. As a result, with Nihon Kohden technology, clinicians can access a higher level of information, enabling more accurate diagnoses and ultimately, better outcomes.



[us.nihonkohden.com](http://us.nihonkohden.com)

Prefense is a registered Trademark and  
Early Detection and Notification System is a  
Trademark of Nihon Kohden Corporation.

MMLB 058 (A)-CO-0266

# Ambulatory Transmitter ZM-520/521PA



Scalable to  
Conveniently  
Monitor Patients  
from Virtually  
any Location

- Integrated 2.2" color screen makes it easy to get patient information at the point of care:
  - Continuous real-time waveform and vital signs
  - 10 minute vital sign trends
  - 10 minute full disclosure
  - Multi-vector ECG view
- Single Lead or Multi-Lead ECG monitoring with heart rate, respiration rate, apnea
- Operates up to 3.5 days on 2 "AA" alkaline batteries, measuring up to 8 vectors of ECG and Respiration
- Integrates with CNS-6201A High Acuity Central Stations
- Automatic data integration to your electronic charting system using the CGS-9002 HL7 Gateway System
- Includes our unprecedented 5-year parts and labor warranty



# Specifications

## Ambulatory Transmitter

### ZM-520/521PA

#### ZM-520/521PA

**PARAMETERS** ECG (Up to 8 vectors),  
Respiration (impedance method)

#### TRANSMITTED DATA

**Waveform Data:** ECG (Up to 8 vectors), respiration  
**Status Information:** Battery level, alarm suspended, pause monitoring,  
patient confirmed, ECG lead, pacing detection,  
electrode status, channel ID

#### DATA DISPLAYED ON TRANSMITTER

**Waveforms:** ECG (up to 4 vectors)  
**Numeric Data:** Heart Rate, Respiration Rate,  
**Technical Data:** Channel Number, Filter Setting, Battery Status,  
Alarm Suspend Status, ECG Monitoring Lead,  
Waveform Sensitivity, Lead Off Status  
**Review Data:** Tabular Trend Data (10 minutes),  
Full Disclosure Waveform (10 minutes)

#### ECG MEASUREMENT

**Vectors:** Up to 8 (I, II, III, aVR, aVL, aVF, V<sub>a</sub>, V<sub>b</sub>)  
**Input Range:**  $\pm 10$  mV or more  
**DC Offset Tolerance:**  $\pm 500$  mV or more  
**Input Impedance:**  $5\text{ M}\Omega$  or more  
**QRS Detection:** amplitude  $\geq 0.5$  mV  
**Heart Rate Counting Range:** 0, 15 to 300 beats/min  
**Heart Rate Counting Accuracy:**  $\pm 2$  beats/min

#### RESPIRATION MEASUREMENT

**Measuring Method:** Impedance method  
**Measuring Vector:** Between RA and LL  
**Impedance Range:** 220 to  $2,000\ \Omega$   
**Resp Rate Measuring Accuracy:**  $\pm 2$  breaths/min  
**Resp Rate Counting Range:** 0-150 breaths/min

#### TRANSMITTER

**FCC regulation:** FCC part 95 Subpart-H Wireless  
Medical Telemetry Service (WMTS)

#### Transmission Frequency Range:

**ZM-520PA:** 608.0250 to 613.9750 MHz  
**ZM-521PA:** 1,395.025 to 1,399.9750 MHz,  
1,427.0250 to 1,431.9750 MHz

#### BATTERY INFORMATION

**Battery Type:** Two AA type alkaline dry cell primary batteries  
**Battery Lifetime:**  
**ZM-520PA:** Approximately 3.5 days measuring ECG  
and respiration  
**ZM-521PA:** Approximately 2.5 days measuring ECG  
and respiration

#### DIMENSION AND WEIGHT

**Dimension:** 3.1" W x 5.4" H x 1.4" D  
**Weight:** 8.1 oz (excluding batteries)  
**Water Resistance:** Water does not get inside the transmitter except  
for the battery case when immersed in water  
up to 30cm deep for 3 minutes.

#### OPERATING ENVIRONMENT

**Operating Temperature:** 5° to 40°C, 41° to 104°F  
**Operating Humidity:** 30% to 85% (non-condensing)  
**Operating Atmospheric Pressure:** 70 to 106 kPa