NIHON KOHDEN

March 04, 2016

April Battle, Buyer 22
Department of Administration, Purchasing Division
2019 Washington Street East
Charleston, WV 25305

Dear Ms. Battle:

While there are many monitoring companies to choose from, our business model is different and allows for a focus on clinical utilization, while helping you achieve financial predictability, and insuring transparency throughout the partnership. We have the lowest cost of ownership in the industry and we excel in technology advances that improve patient care.

Highlights of our value proposition and reasons why so many hospitals are switching to Nihon Kohden for Enterprise Wide Patient Monitoring:

1. 5 Year Parts and Labor Warranties on All Bedside Monitors and Telemetry Transmitters.
2. 2 year Parts and Labor on Central Stations and associated IT related systems.
3. No-Charge Software Enhancement Upgrades for the life of our products – Annual Upgrades based on input from our customers.
4. No-Charge Overnight Loaner Monitors.
5. No-Charge Consignment Monitors and Devices in stock in your facility for the fastest uptime performance in the industry.
6. No-Charge for our award winning Clinical Training and Go-Life Support Programs.
7. Highest Ratings in the Industry from ECRI and for 35 consecutive quarters from MD Buyline – based on **System Performance, System Reliability, Service Response Time, Service Repair Quality, System Installation and Implementation and Clinical Applications Training**

Nihon Kohden's mission has always been to design and build medical devices that improve patient care and quality of care for clinicians, while helping hospitals control costs. 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.

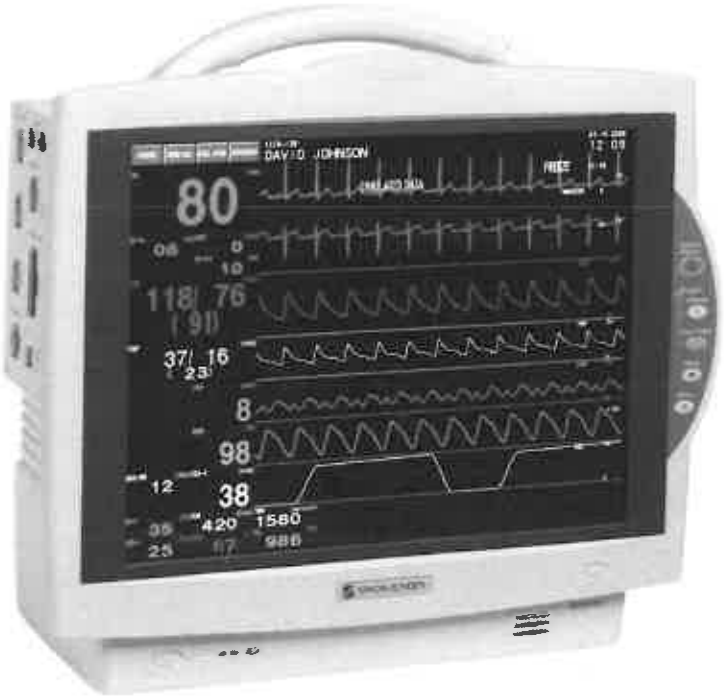
Sincerely,

Mike Stone
Senior Vice President

NIHON KOHDEN AMERICA, INC.
15353 Barranca Parkway • Irvine, California 92618
Telephone: (949) 580-1555 • Fax: (949) 580-1550

Nihon Kohden America

Response RFQ CRFQ 0506 WEH1600000014: Telemetry System for Welch Community Hospital



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Michael Stone
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Phone: (949) 580-1555
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Table of Contents

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.** Nihon Kohden America'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
• 72 hours of five waveform Full Disclosure • 72 hours of minute-to-minute ST recall samples in all leads	• 120-hour sixteen-waveform Full Disclosure	• NKA Devices can reside on the hospital-provided dedicated network • Networked bedside monitors and tele transmitters able to report to a central station
• 16348 Arrhythmia Recall files for 72 hours	• Interpretive diagnostic 12-lead ECG review and management, 200 per patient	• 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
• 72 hours tabular and graphical trends	• 120 hours of both graphic and tabular trends	
• Sophisticated arrhythmia algorithms	• Comprehensive report generating capabilities	
• Multi-parameter full disclosure waveforms • A true diagnostic and interpretative 12-lead ECG capability • Next generation multi-lead arrhythmia monitoring • Hemodynamic and pulmonary calculations • 12-lead ST-segment analysis with alarms • Alarm History Recall display • Color LCD displays on all telemetry transmitters • Respiration monitoring on all telemetry transmitters • Touch screen displays with common user interface • "Acuity-adaptable technology"	• Touch screen capability	• Secure Physician Remote Access. NetKonnect allows for clinical information to reach the physicians and clinicians earlier, enabling quicker diagnosis and treatment

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

- Rated #1 by MD Buyline: NKA's Patient Monitoring and Telemetry Monitoring User Satisfaction Report composite score has surpassed our competitors for the past 36 quarters.
- Rated #1 by Medical Strategic Planning (MSP): ***2005, 2006, 2007, 2008, 2009, 2010 and 2011***. Since 2005, Nihon Kohden has scored first or second in more categories than any other vendor in the MSP Vendor Service Quality Benchmark, and has ranked first in class overall.

- Recipient of Premier Healthcare Alliance's Pinnacle Award (2008), and Supplier Performance Award (2010 and 2011).

What Do Independent Surveys Say About Nihon Kohden?

At Nihon Kohden, 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 Nihon Kohden consistently ranks among the best patient monitoring companies in multiple surveys.

Nihon Kohden has maintained consistently high ratings with both MD Buyline and MSP. In the case of MD Buyline, Nihon Kohden has ranked 1st among major competitors in patient monitoring or telemetry for 36 consecutive quarters.

From MD Buyline: Patient Monitoring User Satisfaction (Current Ratings, Q4 2015)

	System Performance	System Reliability	Installation / Implementation	Applications Training	Service Response Time	Service Repair Quality	Composite Rating
Nihon Kohden America	9.6	9.6	9.3	9.6	9.5	9.6	9.5
Welch Allyn	9.2	9.2	9.2	9.5	9.5	9.4	9.3
Mindray	9.0	9.2	9.4	9.3	9.3	9.3	9.3
Edwards Lifesciences	9.3	9.1	9.2	9.0	9.2	9.2	9.2
Philips Healthcare	9.1	9.1	9.2	9.2	9.0	9.1	9.1
GE Healthcare	9.3	9.1	9.0	8.9	9.1	9.1	9.1
Draeger	8.9	9.0	9.0	9.1	9.1	9.1	9.0
Spacelabs Healthcare	8.9	8.8	8.9	8.9	8.9	8.8	8.9

From MD Buyline: Telemetry User Satisfaction (Current Ratings, Q4 2015)

	System Performance	System Reliability	Installation / Implementation	Applications Training	Service Response Time	Service Repair Quality	Composite Rating
Nihon Kohden America	9.5	9.5	9.5	9.5	9.5	9.6	9.5
Welch Allyn	9.2	9.2	9.2	9.5	9.5	9.4	9.3
Mindray	8.9	8.9	8.8	8.9	8.9	8.7	8.9
Edwards Lifesciences	9.3	9.1	9.2	9.0	9.2	9.2	9.2
Philips Healthcare	9.2	9.0	9.0	8.9	9.2	9.0	9.1
GE Healthcare	9.2	9.2	9.0	9.2	9.2	9.3	9.2
Draeger	9.0	9.0	9.1	9.1	9.0	9.0	9.0
Spacelabs Healthcare	8.8	8.8	8.8	8.8	8.8	8.8	8.8

- **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.

Formed in 1979, NKA is a wholly owned subsidiary of Nihon Kohden, Japan's leading manufacturer, developer and distributer of electronic 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.

Over 60 Years of Nihon Kohden Innovation:

- 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 CO_2 system for non-intubated patients.
- 2006: Worlds first patient worn ambulatory monitoring device for ECG, Respiratory, SpO2, NIBP monitoring.
- 2007: Worlds first Mainstream CO_2 Monitoring for Non-intubated Patients.
- 2008: Worlds 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: Continuing to improve patient care quality now and in the future ...

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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: 160151
Doc Description: Telemetry
Proc Type: Central Purchase Order

Date Issued	Solicitation Closes	Solicitation No	Version
2016-02-01	2016-03-01 13:30:00	CRFQ 0506 WEH1600000014	1

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

FOR INFORMATION CONTACT THE BUYER
April Battle (304)
558-0067
april.e.battle@wv.gov

Signature X **FEIN # 95-3431506** **DATE** 03/04/2016

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

ADDITIONAL INFORMATON:

The West Virginia Purchasing Division is soliciting bids on behalf of West Virginia Departmetn of Health and Human Resources (WVDHHR), Bureau for Behavioral Health and Health Facilities (BHHF), Welch Community Hospital to establish a contract for the one time purchase of one fifteen (15) bedside monitors; ten (10) medical surgical wearable patient monitors; and two (2) information centers. Vendor is to provide installation and in-service training for medical staff.

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	5,587.50	83,812.50

Comm Code	Manufacturer	Specification	Model #
42181719	Nihon Kohden	Refer to Quote	BSM-6312-S

Extended Description :

3.1.1 Bedside monitors

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	1,462.00	14,625.00

Comm Code	Manufacturer	Specification	Model #
42181719	Nihon Kohden	Refer to Quote	ZM-520PA

Extended Description :

3.1.2 Medical surgical wearable patient monitors.

5-year warranty on BSM

2-year warranty on CMS;

Extended Warranty available

ADDITIONAL TERMS AND CONDITIONS

See attached document(s) for additional Terms and Conditions

Exhibit A

Description/Equipment/One Time Purchase		UNSPSC	Quantity	Cost Per Unit	Total Cost
3.1.1	Bedside monitors	42181719	15	$5,587.50	$83,812.50
3.1.2	Medical surgical wearable patient monitors	42181719	10	$1,462.50	$14,625.00
3.1.3	Information center	42181719	2	$29,812.50	$59,625.00
3.1.4	Warranty	42181719	1	$0	$0
3.1.5	Manual/CDs	55101521	1	$0	$0
3.1.6	Installation	81111809	1		$5,500.00
3.1.7	In-service medical staff	86000000	1	$0	$0
Other charges include: Laser Printer, WLAN Coverage, Hardware, ECG Lead wire sets					
Total Cost					$182,051.17
*For details, please refer to the Quote attached to this RFP Response					

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

NIHON KOHDEN AMERICA
Vendor Name (Printed)

15353 Barranca Parkway
Irvine, CA 92618
Purchase Order Address

6017 Solution Center, Lockbox #776017, Chicago IL 60677-6000
Vendor Remit-To Address:

Michael Ohsawa
Vendor Authorized Representative (Printed)

Signature

Date

(949) 580-1555
Telephone

(949) 580-1550
Fax

Michael_Ohsawa@nkusa.com
E-mail

CERTIFICATIONAND SIGNATURE PAGE

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 of Operations
(Authorized Signature) (Representative Name, Title)

(949) 580-1555
(Phone Number) (Fax Number) (Date)

NIHON KOHDEN

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

Quotation Date: 02/02/16
Quotation #: 01220280
Valid for: 60 days

Prepared By: Joe Shehab
Salesperson: Joe Shehab
Terms: Net 45 Days
Warranty: Capital Equipment as Stated
FOB: Destination
Ship: Approx. 90 Days ARO

Contract: GSA / FSS M Contract# V797P-4439B
Discounts: Equipment Discount 25%, Supply Discount 15% , Selected Items 1%; Freight: FOB Destination; Payment Terms: Net 45 Days; Contract Number: V797P-4439B;

Monitoring Pricing Summary

Department	Total
Bedside monitors and Telemetry	**182,051.17**
Total:	**182,051.17**

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
			Bedside monitors and Telemetry			
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.	39,750.00	29,812.50	59,625.00
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.	9,000.00	6,750.00	6,750.00
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.	11,000.00	8,250.00	8,250.00
15	BSM-6312-S	E	TR-6000 bedside monitor with 10.4" LCD Display,1 Multi-Port connector and Nellcor SpO2. Measures ECG (1 vector,8 vector or interpretive 12 Lead),respiration (thermistor or impedance),Nellcor SpO2,NIBP,invasive blood pressures (up to 7 with additional Multi-Port connectors),dual temperature,EtCO2,cardiac output,BIS,and FiO2. Monitor features Nihon Kohden's exclusive Multi-Port connectors that eliminate the need for modules to monitor multiple parameters,10.4 inch active matrix color LCD 15 trace display,touchscreen operation,drug calculations,hemodynamic calculations,pulmonary calculations,12 Lead ST measurements,12 Lead	7,450.00	5,587.50	83,812.50

			interpretive ECG and 24 hour multi-wave full disclosure.Includes ECG patient cable,3 wire snap Lead set,SpO2 connection cable,3 disposable SpO2 probes (reusable SpO2 probes may be ordered from Nellcor),NIBP connection hose,and 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.			
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.	1,950.00	1,462.50	14,625.00
10	BR-916PA	S	ECG Lead Set 6 Wire Snap Type	109.00	92.65	926.50
1	A/FQW-50-2-100	S	Recording Paper for BSM-6000, BSM-9000 and LifeScope G9 series monitors. 10 packs per box.	35.00	29.75	29.75
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	1,266.21	2,532.42
1	#INSTALL-SYSTEM	N	System Installation Charge. Basic installation charge for BSM-9000 monitors and all hardwired, telemetry, WLAN systems. Charge is per individual department to be installed.	1,000.00	1,000.00	1,000.00
15	#INSTALL-HW	N	Hardwired Bedside Installation Charge: Cost per bed for each location where a hardwired connection for a bedside is required.	300.00	300.00	4,500.00
1	CLINICAL-ED	N	Clinical Partnership Program for Networked Systems. Our Clinical Partnership Program provides weekday training and support during monitoring system implementation. Our user training courses utilize a blended-learning concept to improve efficiencies and to facilitate the learning process. Product support materials are customized to meet the particular learning needs of each institution. This Clinical Partnership Program consists of four parts. 1) Basic product orientation and user training, 2) Up to twelve Clinical Resource staff development classes, 3) Live bedside support during the implementation of the new system, and 4) On-going customer	0.00	0.00	0.00

			support. Complimentary product education courses are included through our e-learning portal. Total value is $30,000.00			
			Department Total:		**182,051.17**	
				Quote Total:		**182,051.17**

REQUEST FOR QUOTATION
CRFQ 0506 WEH1600000014
WEH1600000003 Telemetry System

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 (BHHF), 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 two (2) 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.
   Nihon Kohden 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 two (2) 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 (15) 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 using five (5) electrodes. Nihon Kohden patient monitors can operate with 3, 6 or 10 electrode ECG cables.

3.1.1.1.2 Must have twelve (12)-lead ECG monitoring with five (5) electrodes. Not available. Nihon Kohden 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. Yes

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.

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 ($C0_2$), a pressure and an additional pressure or temperature measurement plus optional cardiac output.

Yes, Nihon Kohden monitors use Smart Cable technology that allows for flexible monitoring parameters without having t add expensive extensions. Parameters available throught the Smart Cable system include Main stream CO2 monitoring for both Intubated and non-intubated patients, invasive blood pressure, cardiac output, BIS monitoring, additional temperature measurements, and O2 measurements

3.1.1.1.6 Must have pulse oximetry technologies for accurate performance even in cases with low perfusion.
Yes, Masimo Set, Nellcor Oxymax or Nihon Kohden SpO2 technologies are available.

3.1.1.1.7 Must have pulse pressure variation (PPV) that can be calculated from beat to beat arterial pressure valves.
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.
Yes, all features are available though the Menu system but additionally Nihon Kohden monitors offer direct access to most features that allows simple one touch access to the most common user functions.

3.1.1.2.2 Must have patient management with tabular and graphic trends.
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.
Yes, these are standard features of Nihon Kohden monitors.

3.1.1.2.4 Must have a drug calculator.
Yes, this is a standard feature of Nihon Kohden monitors.

3.1.1.2.5 Must have settings profile functionality.
Yes, this is a standard feature of Nihon Kohden monitors.

3.1.1.2.6 Must have automatic alarm limits. Yes, this is a standard feature of Nihon Kohden monitors.

3.1.1.2.7 Must have basic event surveillance for automatic detection of patient status deterioration. Yes, this is a standard feature of Nihon Kohden monitors.

3.1.1.2.8 Must have capability to silence alarms from bedside.
Yes, this is a standard feature of Nihon Kohden monitors.

3.1.1.2.9 Must have capability to assign a monitor and a telemetry device to same patient. While Nihon Kohden monitors do not off pairing that allows both a bedside and a transmitter to be assigned at the same toime to one patient we do offer a unique feature called device change that allows for the monitor device to be quickly changed

without requiring moving the patient on the central monitor. This allows for a telemetry transmitter to be used when ambulatory monitoring is required and a bedside monitor to be used at other times while maintaining a continuous patient record.

3.1.1.2.10 Must have multiple input devices: Touchscreen, mouse, and keyboard. Yes. Wireless remote control is also available.

3.1.1.2.11 Must have a minimum of a ten (10) inch to a maximum twelve (12) inch flat panel display with wide viewing angle, large numerics, permanently visible alarm limits and up to six real-time waves. Nihon Kohden 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.

3.1.1.2.12 Must have graphical measurement windows showing which measurements are being used by which device. Yes, the main viewing windows 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.
Yes, additionally all Nihon Kohden monitors also 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.
Yes, all Nihon Kohden 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.

Yes. Nihon Kohden 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. Yes, standard feature.

3.1.1.6.2 The user interface must be designed for operation.
Yes, standard feature.

3.1.1.6.3 Must have keys with icons allowing monitoring task to be performed directly on the monitor screen.
Yes, standard feature.

3.1.1.6.4 The monitors must display a minimum of six (6) measurement waves simultaneously.
Yes, Nihon Kohden 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.
Yes, standard feature.

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

3.1.1.6.7 Must have mounting options for flexible space saving placement of the monitor.
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.
All Nihon Kohden include as a standard item 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.
Yes, standard feature on all Nihon Kohden 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.
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.
Yes, standard feature on all Nihon Kohden bedside monitors.

3.1.1.7.5 Must have pulse oximetry technology to perform accurately even in cases of low perfusion.
Yes, Masimo Set, Nellcor Oxymax or Nihon Kohden SpO2 technologies are available.

3.1.1.7.6 Must have choice of mainstream, side-stream and mainstream $C0_2$ monitoring for high quality measurements with intubated and non-intubated patients.
Nihon Kohden offers the capONE CO2 system that provides mainstream CO2 monitoring that can be used for Intubated and non-intubated patients. If side stream CO is requires we can provide Oridion MicroStream CO2 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.
Yes, standard feature on all Nihon Kohden bedside monitors.

3.1.1.7.8 Drug calculator must have ability to include a list of commonly used drugs.
Yes, standard feature on all Nihon Kohden bedside monitors.

3.1.1.7.9 Must have basic event surveillance that automatically detects changes in patient's condition and stores an electronic record providing you with a minimum twenty (20) minutes of data sampled every twelve (12) seconds.
Yes, standard feature on all Nihon Kohden bedside monitors.

3.1.1.7.10 Events must be stored in a database for review and documented in a report or in a recording.
Yes, standard feature on all Nihon Kohden bedside monitors Yes, standard feature on all Nihon Kohden bedside monitors.

Yes, the Nihon Kohden CNS-6200 central station can display up to 16 patients on a single display.

3.1.1.9.5 Main screen must have back lighting to aid alarm recognition.
Yes, standard feature with Nihon Kohden.

3.1.1.9.6 Must have volume indicator on main screen.
Yes, standard feature with Nihon Kohden.

3.1.1.9.7 Must have a minimum two (2) channel recorder to a maximum four (4) channel recorder.
Yes, standard feature with Nihon Kohden. 3 channel recorder.

3.1.1.9.8 Must have a clinical review application to provide a detailed retrospective analysis of patient's condition.
Yes, standard feature with Nihon Kohden.

3.1.1.9.9 Must include all necessary PC hardware and connections.
Yes, standard feature with Nihon Kohden.

3.1.1.9.10 Must have upgradeability.
Yes. Nihon Kohden provides all software updates including feature enhancement software at no charge for the life of the monitor.

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

3.1.2.1 Monitors:

3.1.2.1.1 Must have continuous electrocardiogram (ECG) monitoring with pulse oximetry option.
Yes, standard feature with Nihon Kohden.

3.1.2.1.2 Must have color touch screen display.
Yes, standard feature with Nihon Kohden.

3.1.2.1.3 Must have automatic sleep mode to conserve battery while maintaining privacy.
Yes, standard feature with Nihon Kohden.

3.1.2.1.4 Must have ability to view patient status with a single touch.
Yes, standard feature with Nihon Kohden.

3.1.2.1.5 Must have a minimum (2) channel of real time waveform.
Yes, standard feature with Nihon Kohden. Nihon Kohden transmitters offer the ability to view four real time waveforms.

3.1.2.1.6 Must have a minimum four (4) screen formats.

Yes, standard feature with Nihon Kohden.

3.1.2.1.7 Must have flexible monitoring parameters.
Yes, standard feature with Nihon Kohden.

3.1.2.1.8 Must have wide variety of measurements including ECG, $SP0_2$ and blood pressure.
Yes, standard feature with Nihon Kohden.

3.1.2.1.9 Must have ability to use disposable or rechargeable batteries.
Yes, standard feature with Nihon Kohden.

3.1.2.1.10 Must have battery status display on device and information center.
Yes, standard feature with Nihon Kohden.

3.1.2.2 Alarms:

3.1.2.2.1 Must display alarms for ECG, SPO_2 and non-invasive blood pressure.
Alarms are displayed at the CNS-6200 Central Station.

3.1.2.2.2 Must have one touch review of current alarm settings, alarm histories, vital trends or activate monitor from sleep mode.
Available at the CNS-6200 Central Station.

3.1.2.3 Hospital Acquired Infections:

3.1.2.3.1 Must have connecters that reduce collection of soils and liquids.
Yes, standard feature with Nihon Kohden.

3.1.2.3.2 The device must be smooth to allow wiping and support cleaning by a variety of standard low to high-level disinfectants.
Yes, standard feature with Nihon Kohden.

3.1.2.3.3 Device must withstand periodic sterilization.
Yes, standard feature with Nihon Kohden.

3.1.2.3.4 Must have reusable lead sets.
Yes, standard feature with Nihon Kohden.

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

3.1.3.1 Must have main screen for displaying real-time waves and parameters for a minimum of ten (10) patients. \
Yes, the Nihon Kohden CNS-6200 central station can display up to 16 patients on a single display.

3.1.3.2 Must have separate patient window for viewing detailed real-time or stored data for individual patient.
Yes, standard feature with Nihon Kohden.

3.1.3.3 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.
Yes, standard feature with Nihon Kohden. 120 hours of stored patient monitoring data with over 10,000 alarm records per patient and strips of up to 16 waveforms.

3.1.3.4 Must support the telemetry system.
Yes, standard feature with Nihon Kohden.

3.1.3.5 Must support telemetry patient monitor.
Yes, standard feature with Nihon Kohden.

3.1.3.6 Must support cable-less measurements.
Yes, some parameters such as ECG must have cables to attach the ECG electrodes and other parameters such as NIBP are cable-less.

3.1.3.7 Must support wearable patient monitor.
Yes

3.1.3.8 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.
Yes, data can be viewed through personal PC or through IOS devices.

3.1.3.9 Must have name and patient identification information from hospital information center when clinical data server is present.
Yes, available when using the HL7 Gateway server.

3.1.3.10 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.
Yes, standard feature with Nihon Kohden.

3.1.3.11 Must have configurable central reports for one (1) or more patients that can be generated on demand or on a scheduled internal basis.
Yes, standard feature with Nihon Kohden.

3.1.3.12 Must support printing of a predefined set of reports.
Yes, standard feature with Nihon Kohden.

3.1.3.13 Must have tabular and graphical trend review.

Yes, standard feature with Nihon Kohden.

3.1.3.14 Must support device locator option which remotely identifies the location of the telemetry devices.
Yes, though third party locator systems.

3.1.3.15 Must support communication with wired and wireless patient monitor.
Yes, standard feature with Nihon Kohden.

3.1.3.16 Patient Monitoring Data:

3.1.3.16.1 Must have patient data (waves, parameters, and alarms) obtained from patient monitors – (hard wired, wireless, telemetry) connected to the clinical network.
Yes, standard feature with Nihon Kohden.

3.1.3.17 Patient Data Display:

3.1.3.17.1 Must have patient monitoring data viewed on main screen and in more detail on a separate patient window.
Yes, standard feature with Nihon Kohden.

3.1.3.17.2 The main screen must display real-time waveforms, numeric and alarms for a minimum of ten (10) patients.
Yes, standard feature with Nihon Kohden. Up to 16 patients.

3.1.3.17.3 Must have display a minimum of thirty-two (32) waveforms in either single or dual column formats.
Yes, standard feature with Nihon Kohden.

3.1.3.17.4 Must have patient window directly accessible from main screen with greater data detail.
Yes, standard feature with Nihon Kohden.

3.1.3.18 Alarm Response:

3.1.3.18.1 Must have color coding – capability to visually identify a patient in alarm and its severity on the main screen.
Yes, standard feature with Nihon Kohden.

3.1.3.18.2 Must have multi-level, audible alarm tones that indicate alarms and their severity.
Yes, standard feature with Nihon Kohden.

3.1.3.18.3 Must have ability to review most recent alarm and print strip immediately.
Yes, standard feature with Nihon Kohden.

3.1.3.18.4 Must have ability to modify alarms with password protection.
Yes, standard feature with Nihon Kohden.

3.1.3.18.5 Must have ability to turn off alarm.
Yes, standard feature with Nihon Kohden.

3.1.3.19 Cableless Measurements:

3.1.3.19.1 Measurement must be displayed on information center monitoring telemetry, recording and alarming arterial oxygen saturation, pulse rate, blood pressure (adult and pediatric).
Yes, all parameters are displayed when using the ZM-0540PA wireless monitor.

3.1.3.20 Recording and Printing:

3.1.3.20.1 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.
Yes, standard feature with Nihon Kohden.

3.1.3.20.2 Must have a minimum of fifty millimeter (50 mm) wall thermal array recorder that provides high resolution, high quality waveforms.
Yes, standard feature with Nihon Kohden.

3.1.3.20.3 Must print grid and waveforms simultaneously to assure accurate registration.
Yes, standard feature with Nihon Kohden.

3.1.3.20.4 Recorder must have capability to record a minimum of two waveforms and a minimum of three lines of annotations.
Yes, standard feature with Nihon Kohden.

3.1.3.21 User Configuration:

3.1.3.21.1 Monitoring controls, display formats, alarm response and patient data must have ability to be configured to user performances with configuration tools.
Yes, standard feature with Nihon Kohden.

3.1.3.21.2 Must have unit-wide configurations that are in password protected applications that can be modified for individual patients.

Yes, standard feature with Nihon Kohden.

3.1.3.22 On-Line Help:

3.1.3.22.1 Must have on-line help available for both clinical application and service functions.
Yes, standard feature with Nihon Kohden.

3.1.3.23 Arrhythmia Monitoring:

3.1.3.23.1 Must have multi-lead arrhythmia monitoring on user selected primary and secondary leads.
Yes, standard feature with Nihon Kohden.

3.1.3.23.2 Must have arrhythmia detector of the following alarms:

3.1.3.23.2.1 Asystole
Yes, standard feature with Nihon Kohden.

3.1.3.23.2.2 Ventricular fibrillation
Yes, standard feature with Nihon Kohden.

3.1.3.23.2.3 Ventricular tachycardia
Yes, standard feature with Nihon Kohden.

3.1.3.23.2.4 Ventricular bradycardia
Yes, standard feature with Nihon Kohden.

3.1.3.23.2.5 Extreme bradycardia
Yes, standard feature with Nihon Kohden.

3.1.3.23.2.6 Extreme tachycardia
Yes, standard feature with Nihon Kohden.

3.1.3.23.2.7 Pacer not captive
Yes, standard feature with Nihon Kohden.

3.1.3.23.2.8 Pacer not pacing
Yes, standard feature with Nihon Kohden.

3.1.3.23.2.9 Premature ventricular contraction (PVC)-min
Yes, standard feature with Nihon Kohden.

3.1.3.23.2.10 Low heart rate
Yes, standard feature with Nihon Kohden.

3.1.3.23.2.11 High heart rate

Yes, standard feature with Nihon Kohden.

3.1.3.23.2.12 Irregular heart rate
Yes, standard feature with Nihon Kohden.

3.1.3.23.2.13 Non-sustained V-Tach
Yes, standard feature with Nihon Kohden.

3.1.3.23.2.14 Supraventricular Tach
Yes, standard feature with Nihon Kohden.

3.1.3.23.2.15 Ventricular rhythm
Yes, standard feature with Nihon Kohden.

3.1.3.23.2.16 Run PVCs
Yes, standard feature with Nihon Kohden.

3.1.3.23.2.17 Pair PVCs
Yes, standard feature with Nihon Kohden.

3.1.3.23.2.18 Multiform PVCs
Yes, standard feature with Nihon Kohden.

3.1.3.23.2.19 R on T PVC
Yes, standard feature with Nihon Kohden.

3.1.3.23.2.20 Pause
Yes, standard feature with Nihon Kohden.

3.1.3.23.2.21 Missed beat
Yes, standard feature with Nihon Kohden.

3.1.3.23.2.22 Ventricular begeminy
Yes, standard feature with Nihon Kohden.

3.1.3.23.2.23 Ventricular trigeminy
Yes, standard feature with Nihon Kohden.

3.1.3.23.2.24 Arterial fibrillation
Atrial fibrillation detection is currently pending FDA clearance and will be added to all system under a no charge software upgrade once cleared.

3.1.3.24 Patient Data Review:

3.1.3.24.1 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.
Yes, standard feature with Nihon Kohden is 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.

3.1.3.24.2 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.
Yes, standard feature with Nihon Kohden.

3.1.3.25 Wave Review:

3.1.3.25.1 Must have continuous full disclosure a minimum of four (4) configurable waves per patient.
Yes, standard feature with Nihon Kohden is 16 waveform full disclosure for 120 hours.

3.1.3.25.2 Must have one (1) – sixty (60) minute wave duration per screen.
Yes, standard feature with Nihon Kohden.

3.1.3.25.3 Must have timeline, tabulation, trend and event navigators for fast searches and greater context.
Yes, standard feature with Nihon Kohden.

3.1.3.25.4 Must have strip reports.
Yes, standard feature with Nihon Kohden.

3.1.3.26 Alarm Review:

3.1.3.26.1 Must have a minimum of (30) seconds (30s) compressed waveforms of alarm or saved strip events.
Yes, standard feature with Nihon Kohden.

3.1.3.26.2 Must have a minimum of four (4) waveforms per event.
Yes, standard feature with Nihon Kohden is up to 16 waveforms.

3.1.3.26.3 Must have simultaneous display of alarm events.
Yes, standard feature with Nihon Kohden.

3.1.3.26.4 Must have search by alarm severity.
Yes, standard feature with Nihon Kohden.

3.1.3.26.5 Must have interval measurement.

Yes, standard feature with Nihon Kohden.

3.1.3.27 Event Review:

3.1.3.27.1 Must have ten (10) configurable groups with a minimum of five (5) alarm criteria per group.
Yes, standard feature with Nihon Kohden.

3.1.3.27.2 Must have strip delayed for verification of event criteria.
Yes, standard feature with Nihon Kohden.

3.1.3.27.3 Must have total occurrences of events calculated and displayed in one (1), four (4), eight (8), twelve (12), and twenty-four (24) hour time scales.
Yes, standard feature with Nihon Kohden.

3.1.3.28 Trend Review:

3.1.3.28.1 Must have tabular display of physiological parameters.
Yes, standard feature with Nihon Kohden.

3.1.3.28.2 Must have graphical presentation at a minimum of one (1) minute resolution using bivariate trend plots.
Yes, standard feature with Nihon Kohden.

3.1.3.28.3 Must have ten (10) configurable groups with a minimum of five (5) bivariate trend plots.
Yes, standard feature with Nihon Kohden.

3.1.3.28.4 Must have exact parameters displayed for cursor time location.
Yes, standard feature with Nihon Kohden.

3.1.3.28.5 Must have simultaneous display of trend plots.
Yes, standard feature with Nihon Kohden.

3.1.3.28.6 Must have trends displayed in one (1), four (4), eight (8), twelve (12), and twenty-four (24) hour time scales.
Yes, standard feature with Nihon Kohden.

3.1.3.29 Twelve (12) Lead Review:

3.1.3.29.1 Must have retrospective review of twelve (12) derived leads.
Nihon Kohden monitors perform diagnostic interpretive 12 lead ECGs using 10 electrodes. Derived is not avialble.

3.1.3.29.2 Must have 2.5 to 10 second snippets.
Yes, standard feature with Nihon Kohden.

3.1.3.29.3 Must have 3 x 4, 6 x 2 and 12 x 1 (row by column) display and reports.
Yes, standard feature with Nihon Kohden.

3.1.3.30 Information Center:

3.1.3.30.1 Must include PC with the following standard components:

3.1.3.30.1.1 Must have DVD/DC ROM and disk drive.
Not required. DVD/DCROM and disk drive are security risks. Only internal HDD is used.

3.1.3.30.1.2 Must have audio cord and speaker.
Yes, standard feature with Nihon Kohden.

3.1.3.30.1.3 Must have keyboard.
Yes, standard feature with Nihon Kohden.

3.1.3.30.1.4 Must have mouse.
Yes, standard feature with Nihon Kohden.

3.1.3.30.1.5 Must have operating system software which is compatible with Windows XP or later (to insure compatibility with Agency's current operating system).
Yes, standard feature with Nihon Kohden. Note: XP is no longer available from Nihon Kohden nor supported by Microisoft.

3.1.3.30.1.6 Software must have capability for monitoring a minimum of ten (10) patients.
Up to 16 is available.

3.1.3.30.1.7 Must have uninterruptible power supply (UPS).
Yes, standard feature with Nihon Kohden.

3.1.3.30.1.8 Must have external speakers.
Speakers are external from the PC.

3.1.3.31 Waveform Display:

3.1.3.31.1 Screen resolution must a minimum of 1280 x 1024.
Yes, standard feature with Nihon Kohden. 1920x1200 resolution.

3.1.3.31.2 Vertical refresh rate must be a minimum of 60 Hz.
Yes, standard feature with Nihon Kohden.

3.1.3.31.3 Must have video-cable connector.
Yes, standard feature with Nihon Kohden.

3.1.3.31.4 Must have a minimum color depth of twenty-four (24) -bit true color.
Yes, standard feature with Nihon Kohden.

3.1.3.32 Display Formats:

3.1.3.32.1 Must have single column: 4 x 1, 6 x 1, 8 x 1.
Yes, standard feature with Nihon Kohden.

3.1.3.32.2 Must have at least a 7.0 second wave trace at 24 mm/s.
Yes, standard feature with Nihon Kohden.

3.1.3.32.3 Must have a minimum 14.0 second wave trace at 12.5 mm/s.
Yes, standard feature with Nihon Kohden.

3.1.3.32.4 Must have ability of dual column 2 x 2, 3 x 2, 4 x 2, 5 x 2, 6 x 2, 8 x 2.
Yes, standard feature with Nihon Kohden.

3.1.3.32.5 Dual column must have a minimum 3.3 second wave trace at 25 mm/s.
Yes, standard feature with Nihon Kohden.

3.1.3.32.6 Dual column must have a minimum 6.6 second wave trace at 12.5 mm/s.
Yes, standard feature with Nihon Kohden.

3.1.4 Equipment must have a minimum one (1) year warranty.
Standard Warranty is 5 years parts and depot labor for Bedside Monitors and Telemetry Transmitters and 2 year parts and depot labor warranty for Central Station.

3.1.5 Must include manual/CDs for trouble shooting equipment problems.
CD's will be included.

3.1.6 Must include all installation labor and supplies.
Install and labor are Included in the proposal, please note it is the customers responsibility to pull the cable.

3.1.7 Must provide on-site staff education for all of the nursing staff (approximately 100) for instruction for equipment use and care.
Clinical Partnership Program for Networked Systems. Our Clinical Partnership Program provides weekday training and support during monitoring system implementation. Our user training courses utilize a blended-learning concept to improve efficiencies and to facilitate the learning process. Product support materials are customized to meet the particular learning needs of each institution. This Clinical Partnership Program consists of four parts. 1) Basic product orientation and user

training, 2) Up to twelve Clinical Resource staff development classes, 3) Live bedside support during the implementation of the new system, and 4) On-going customer support. Complimentary product education courses are included through our e-learning portal.

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.
Nihon Kohden response: Acknowledged and agreed.

4.2 Pricing Page: Vendor should complete the Pricing Page by providing a Unit Price for the Commodity or Service Lines on the Request for Quotation. 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.
Nihon Kohden response: Please refer to the Pricing Page

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.
Nihon Kohden 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.
Nihon Kohden 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.
Nihon Kohden 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.
Nihon Kohden response: Agreed.

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

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

Nihon Kohden 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:

Nihon Kohden 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: _____

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

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

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

☐ A **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

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 by the Purchasing Division staff immediately upon bid opening. The Purchasing Division will consider any file that cannot be immediately opened and/or 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 if those documents are required with the bid.

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 §§ 5A-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.

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. 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.

7. 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.

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

☐ **BID BOND:** All Vendors shall furnish a 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.

9. 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.

10. 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.

11. 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.

12. 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.

13. 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.

14. 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.

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. 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.

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

18. 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.

19. 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.

20. PREVAILING WAGE: Vendor shall be responsible for ensuring compliance with prevailing wage requirements and determining when prevailing wage requirements are applicable.

21. 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.

22. 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.

23. 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.

24. 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.

25. 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.

26. 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.

27. 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.

28. 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.

29. 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.

30. 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 §§ 5A-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.

31. LICENSING: In accordance with West Virginia Code of State Rules § 148-1-6.1.e, 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.

32. 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.

33. 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.

34. 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.

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.

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 heath, 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.

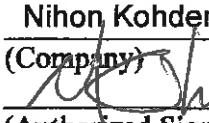
All bids and offers including domestic aluminum, glass or steel products that exceed bid or offer prices including foreign aluminum, glass or steel products after application of the preferences provided in this provision may be reduced to a price equal to or lower than the lowest bid or offer price for 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.

CERTIFICATIONAND SIGNATURE PAGE

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 of Operations
(Authorized Signature) (Representative Name, Title)

(949) 580-1555
(Phone Number) (Fax Number) (Date)

ADDENDUM ACKNOWLEDGEMENT FORM
SOLICITATION NO.: WEH1600000014

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.

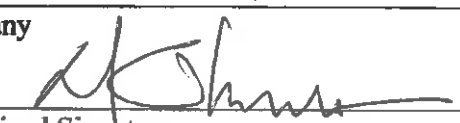
Acknowledgment: I hereby acknowledge receipt of the following addenda and have made the necessary revisions to my proposal, plans and/or specification, etc.

Addendum Numbers Received:
(Check the box next to each addendum received)

[X] Addendum No. 1	[ ] Addendum No. 6
[ ] Addendum No. 2	[ ] Addendum No. 7
[ ] Addendum No. 3	[ ] Addendum No. 8
[ ] Addendum No. 4	[ ] Addendum No. 9
[ ] Addendum No. 5	[ ] 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

3/4/2016
Date

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

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. 111th Congress (2009).

and subcontractors to assist the Agency with any HIPAA required accounting of disclosures survives the termination of the underlying Agreement.

c. **Termination for Cause.** Associate authorizes termination of this Agreement by Agency, if Agency determines Associate has violated a material term of the Agreement. Agency may, at its sole discretion, allow Associate a reasonable period of time to cure the material breach before termination.

d. **Judicial or Administrative Proceedings.** The Agency may terminate this Agreement if the Associate is found guilty of a criminal violation of HIPAA. The Agency may terminate this Agreement if a finding or stipulation that the Associate has violated any standard or requirement of HIPAA/HITECH, or other security or privacy laws is made in any administrative or civil proceeding in which the Associate is a party or has been joined. Associate shall be subject to prosecution by the Department of Justice for violations of HIPAA/HITECH and shall be responsible for any and all costs associated with prosecution.

e. **Survival.** The respective rights and obligations of Associate under this Addendum shall survive the termination of the underlying Agreement.

5. **General Provisions/Ownership of PHI.**

a. **Retention of Ownership.** Ownership of the PHI resides with the Agency and is to be returned on demand or destroyed at the Agency's option, at any time, and subject to the restrictions found within section 4.b. above.

b. **Secondary PHI.** Any data or PHI generated from the PHI disclosed hereunder which would permit identification of an individual must be held confidential and is also the property of Agency.

c. **Electronic Transmission.** Except as permitted by law or this Addendum, the PHI or any data generated from the PHI which would permit identification of an individual must not be transmitted to another party by electronic or other means for additional uses or disclosures not authorized by this Addendum or to another contractor, or allied agency, or affiliate without prior written approval of Agency.

d. **No Sales.** Reports or data containing the PHI may not be sold without Agency's or the affected individual's written consent.

e. **No Third-Party Beneficiaries.** Nothing express or implied in this Addendum is intended to confer, nor shall anything herein confer, upon any person other than Agency, Associate and their respective successors or assigns, any rights, remedies, obligations or liabilities whatsoever.

f. **Interpretation.** The provisions of this Addendum shall prevail over any provisions in the Agreement that may conflict or appear inconsistent with any provisions in this Addendum. The interpretation of this Addendum shall be made under the laws of the state of West Virginia.

g. **Amendment.** The parties agree that to the extent necessary to comply with applicable law they will agree to further amend this Addendum.

h. **Additional Terms and Conditions.** Additional discretionary terms may be included in the release order or change order process.

AGREED:

Name of Agency: Welch Community Hospital

Signature: _____

Title: C.E.O.

Date: _____

Name of Associate: Nihon Kohden America

Signature: _____

Title: Vice President, Operations

Date: 3/4/2016

Form - WVBAA-012004
Amended 06.26.2013

APPROVED AS TO FORM THIS 26th
DAY OF March 20 16
Patrick Morrisey
Attorney General
BY _____

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.

WV-10
Approved / Revised
08/01/15

State of West Virginia
VENDOR PREFERENCE CERTIFICATE

Certification and application is hereby made for Preference in accordance with ***West Virginia Code***, §5A-3-37. (Does not apply to construction contracts). ***West Virginia Code***, §5A-3-37, provides an opportunity for qualifying vendors to request (at the time of bid) preference for their residency status. Such preference is an evaluation method only and will be applied only to the cost bid in accordance with the ***West Virginia Code***. This certificate for application is to be used to request such preference. The Purchasing Division will make the determination of the Vendor Preference, if applicable.

1. **Application is made for 2.5% vendor preference for the reason checked:**
☐ Bidder is an individual resident vendor and has resided continuously in West Virginia for four (4) years immediately preceding the date of this certification; **or,**
☐ Bidder is a partnership, association or corporation resident vendor and has maintained its headquarters or principal place of business continuously in West Virginia for four (4) years immediately preceding the date of this certification; or 80% of the ownership interest of Bidder is held by another individual, partnership, association or corporation resident vendor who has maintained its headquarters or principal place of business continuously in West Virginia for four (4) years immediately preceding the date of this certification; **or,**
☐ Bidder is a nonresident vendor which has an affiliate or subsidiary which employs a minimum of one hundred state residents and which has maintained its headquarters or principal place of business within West Virginia continuously for the four (4) years immediately preceding the date of this certification; **or,**

2. **Application is made for 2.5% vendor preference for the reason checked:**
☐ Bidder is a resident vendor who certifies that, during the life of the contract, on average at least 75% of the employees working on the project being bid are residents of West Virginia who have resided in the state continuously for the two years immediately preceding submission of this bid; **or,**

3. **Application is made for 2.5% vendor preference for the reason checked:**
☐ Bidder is a nonresident vendor employing a minimum of one hundred state residents or is a nonresident vendor with an affiliate or subsidiary which maintains its headquarters or principal place of business within West Virginia employing a minimum of one hundred state residents who certifies that, during the life of the contract, on average at least 75% of the employees or Bidder's affiliate's or subsidiary's employees are residents of West Virginia who have resided in the state continuously for the two years immediately preceding submission of this bid; **or,**

4. **Application is made for 5% vendor preference for the reason checked:**
☐ Bidder meets either the requirement of both subdivisions (1) and (2) or subdivision (1) and (3) as stated above; **or,**

5. **Application is made for 3.5% vendor preference who is a veteran for the reason checked:**
☐ Bidder is an individual resident vendor who is a veteran of the United States armed forces, the reserves or the National Guard and has resided in West Virginia continuously for the four years immediately preceding the date on which the bid is submitted; **or,**

6. **Application is made for 3.5% vendor preference who is a veteran for the reason checked:**
☐ Bidder is a resident vendor who is a veteran of the United States armed forces, the reserves or the National Guard, if, for purposes of producing or distributing the commodities or completing the project which is the subject of the vendor's bid and continuously over the entire term of the project, on average at least seventy-five percent of the vendor's employees are residents of West Virginia who have resided in the state continuously for the two immediately preceding years.

7. **Application is made for preference as a non-resident small, women- and minority-owned business, in accordance with *West Virginia Code* §5A-3-59 and *West Virginia Code of State Rules*.**
☐ Bidder has been or expects to be approved prior to contract award by the Purchasing Division as a certified small, women- and minority-owned business.

Bidder understands if the Secretary of Revenue determines that a Bidder receiving preference has failed to continue to meet the requirements for such preference, the Secretary may order the Director of Purchasing to: (a) reject the bid; or (b) assess a penalty against such Bidder in an amount not to exceed 5% of the bid amount and that such penalty will be paid to the contracting agency or deducted from any unpaid balance on the contract or purchase order.

By submission of this certificate, Bidder agrees to disclose any reasonably requested information to the Purchasing Division and authorizes the Department of Revenue to disclose to the Director of Purchasing appropriate information verifying that Bidder has paid the required business taxes, provided that such information does not contain the amounts of taxes paid nor any other information deemed by the Tax Commissioner to be confidential.

Under penalty of law for false swearing (West Virginia Code, §61-5-3), Bidder hereby certifies that this certificate is true and accurate in all respects; and that if a contract is issued to Bidder and if anything contained within this certificate changes during the term of the contract, Bidder will notify the Purchasing Division in writing immediately.

Bidder: Nihon Kohden America, Inc. **Signed:** _____

Date: 3/4/2016 **Title:** Vice President of Operations

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 exceed 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: 3/4/2016

State of _____

County of _____, to-wit:

Taken, subscribed, and sworn to before me this ___ day of _____, 20___.

My Commission expires _____, 20___.

AFFIX SEAL HERE

NOTARY PUBLIC _____

ATTACHMENT 1

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.

CERTIFICATE OF LIABILITY INSURANCE

DATE (MM/DD/YYYY): 2/29/2016

THIS CERTIFICATE IS ISSUED AS A MATTER OF INFORMATION ONLY AND CONFERS NO RIGHTS UPON THE CERTIFICATE HOLDER. THIS CERTIFICATE DOES NOT AFFIRMATIVELY OR NEGATIVELY AMEND, EXTEND OR ALTER THE COVERAGE AFFORDED BY THE POLICIES BELOW. THIS CERTIFICATE OF INSURANCE DOES NOT CONSTITUTE A CONTRACT BETWEEN THE ISSUING INSURER(S), AUTHORIZED REPRESENTATIVE OR PRODUCER, AND THE CERTIFICATE HOLDER.

IMPORTANT: If the certificate holder is an ADDITIONAL INSURED, the policy(ies) must be endorsed. If SUBROGATION IS WAIVED, subject to the terms and conditions of the policy, certain policies may require an endorsement. A statement on this certificate does not confer rights to the certificate holder in lieu of such endorsement(s).

PRODUCER ABD Insurance & Financial Services 3 Waters Park Dr., Ste 100 San Mateo CA 94403	**CONTACT NAME:** Susan Gee **PHONE (A/C, No, Ext):** (650) 488-8565 **FAX (A/C, No):** (650) 488-8566 **E-MAIL ADDRESS:** SusanG@theabdteam.com
INSURED Nihon Kohden America, Inc., Nkus Lab & Nihon Kohden Innovation Center 15353 Barranca Parkway Irvine CA 92618-2216	**INSURER(S) AFFORDING COVERAGE** / **NAIC #** INSURER A : Atlantic Specialty Ins. Company 27154 INSURER B : Hudson Specialty Ins. Company INSURER C : INSURER D : INSURER E : INSURER F :

COVERAGES **CERTIFICATE NUMBER:** CL14103106386 **REVISION NUMBER:**

THIS IS TO CERTIFY THAT THE POLICIES OF INSURANCE LISTED BELOW HAVE BEEN ISSUED TO THE INSURED NAMED ABOVE FOR THE POLICY PERIOD INDICATED. NOTWITHSTANDING ANY REQUIREMENT, TERM OR CONDITION OF ANY CONTRACT OR OTHER DOCUMENT WITH RESPECT TO WHICH THIS CERTIFICATE MAY BE ISSUED OR MAY PERTAIN, THE INSURANCE AFFORDED BY THE POLICIES DESCRIBED HEREIN IS SUBJECT TO ALL THE TERMS, EXCLUSIONS AND CONDITIONS OF SUCH POLICIES. LIMITS SHOWN MAY HAVE BEEN REDUCED BY PAID CLAIMS.

INSR LTR	TYPE OF INSURANCE	ADDL INSR	SUBR WVD	POLICY NUMBER	POLICY EFF (MM/DD/YYYY)	POLICY EXP (MM/DD/YYYY)	LIMITS	
A	GENERAL LIABILITY X COMMERCIAL GENERAL LIABILITY CLAIMS-MADE X OCCUR			711-01-46-18-0001	11/1/2015	11/1/2016	EACH OCCURRENCE	$ 1,000,000
							DAMAGE TO RENTED PREMISES (Ea occurrence)	$ 1,000,000
							MED EXP (Any one person)	$ 10,000
	X Global Extension						PERSONAL & ADV INJURY	$ 1,000,000
B	X Errors & Omissions			EMT112559	03/10/2015	03/10/2016	GENERAL AGGREGATE	$ 2,000,000
	GEN'L AGGREGATE LIMIT APPLIES PER: X POLICY PRO-JECT LOC						PRODUCTS - COMP/OP AGG	$ Excluded
							E&O CLaims Made	$ 2,000,000
A	AUTOMOBILE LIABILITY X ANY AUTO ALL OWNED AUTOS HIRED AUTOS SCHEDULED AUTOS NON-OWNED AUTOS			711-01-46-18-0001	11/1/2015	11/1/2016	COMBINED SINGLE LIMIT (Ea accident)	$ 1,000,000
							BODILY INJURY (Per person)	$
							BODILY INJURY (Per accident)	$
							PROPERTY DAMAGE (Per accident)	$
							PIP-Single limit	$ 10,000
A	X UMBRELLA LIAB X OCCUR EXCESS LIAB CLAIMS-MADE DED X RETENTION $ 0			Excluding Products 711-01-46-18-0001	11/1/2015	11/1/2016	EACH OCCURRENCE	$ 5,000,000
							AGGREGATE	$ 5,000,000
								$
A	WORKERS COMPENSATION AND EMPLOYERS' LIABILITY Y/N ANY PROPRIETOR/PARTNER/EXECUTIVE OFFICER/MEMBER EXCLUDED? (Mandatory in NH) If yes, describe under DESCRIPTION OF OPERATIONS below	N/A		406-04-25-75-0001	11/1/2015	11/1/2016	X WC STATU-TORY LIMITS OTH-ER	
							E.L. EACH ACCIDENT	$ 1,000,000
							E.L. DISEASE - EA EMPLOYEE	$ 1,000,000
							E.L. DISEASE - POLICY LIMIT	$ 1,000,000
A	Bus. Personal Property			711-01-46-18-0001	11/1/2015	11/1/2016	Special Form	17,400,000
A	Business Income			711-01-46-18-0001	11/1/2015	11/1/2016	Special Form	7,549,240

DESCRIPTION OF OPERATIONS / LOCATIONS / VEHICLES (Attach ACORD 101, Additional Remarks Schedule, if more space is required)
State of West Virginia is named as Additional Insured as their interest may appear regarding General Liability

CERTIFICATE HOLDER

State of West Virginia
2019 Washington Street East
Charleston, WV 25305

CANCELLATION

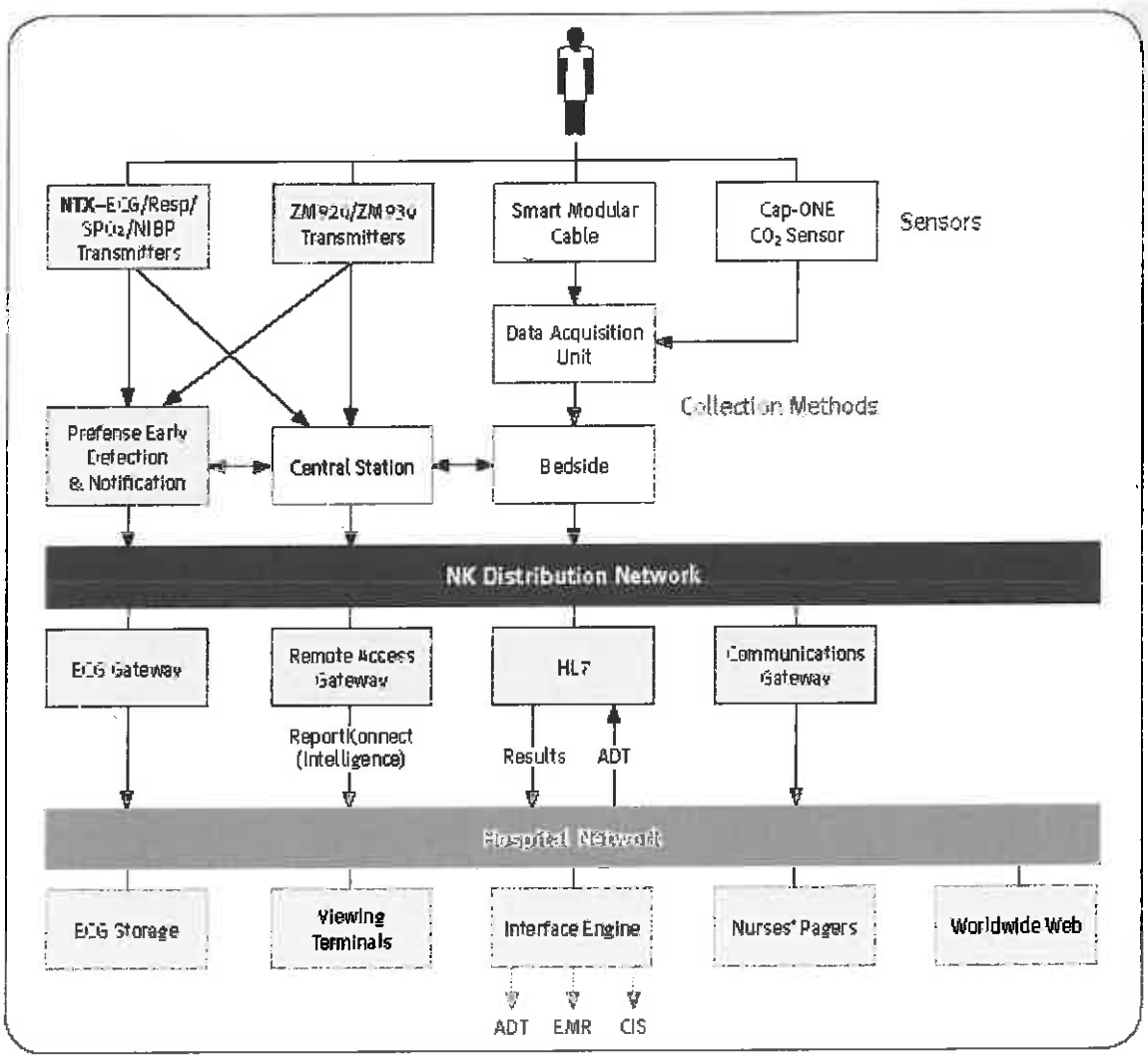
SHOULD ANY OF THE ABOVE DESCRIBED POLICIES BE CANCELLED BEFORE THE EXPIRATION DATE THEREOF, NOTICE WILL BE DELIVERED IN ACCORDANCE WITH THE POLICY PROVISIONS.

AUTHORIZED REPRESENTATIVE

Rod Sockolov/SGEE

Patient Monitoring Solutions

Nihon Kohden'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, Nihon Kohden'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 72-hour six-waveform Full Disclosure, interpretive diagnostic 12-lead ECG review and management; 72 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 preceding table, 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.

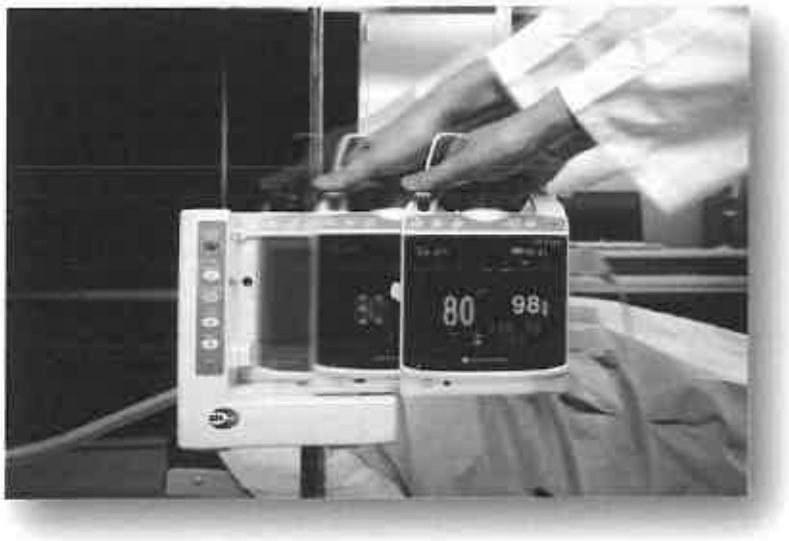
The BSM-1700 Transport Monitor

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, Nihon Kohden'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 and 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 CO2, N2O, O2, 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 (O2, CO2, N2O 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 etCO2 Sensor

All NKA bedside monitors have CO2 capture capability. NKA provides an exclusive etCO2 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 CO2 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

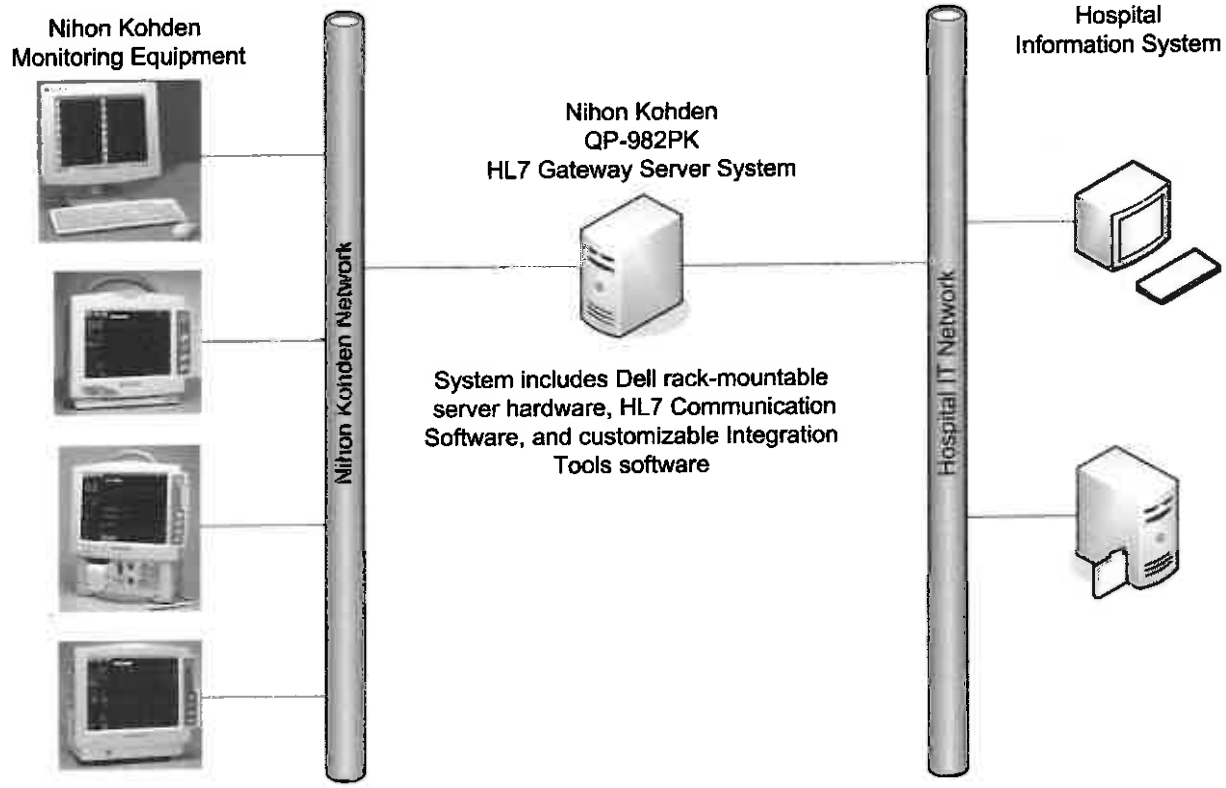
technology. The CapONE system allows for safe, accurate capnography monitoring, and even quick-start CO2 measurement.

HL7 Gateway

Nihon Kohden's HL7 Gateway Interface includes software and hardware to facilitate the transfer of ADT and results messages between the Nihon Kohden 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 Nihon Kohden'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 Nihon Kohden bedside monitor or central station, a request for patient demographic information is sent to the HL7 Gateway. The Nihon Kohden 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.

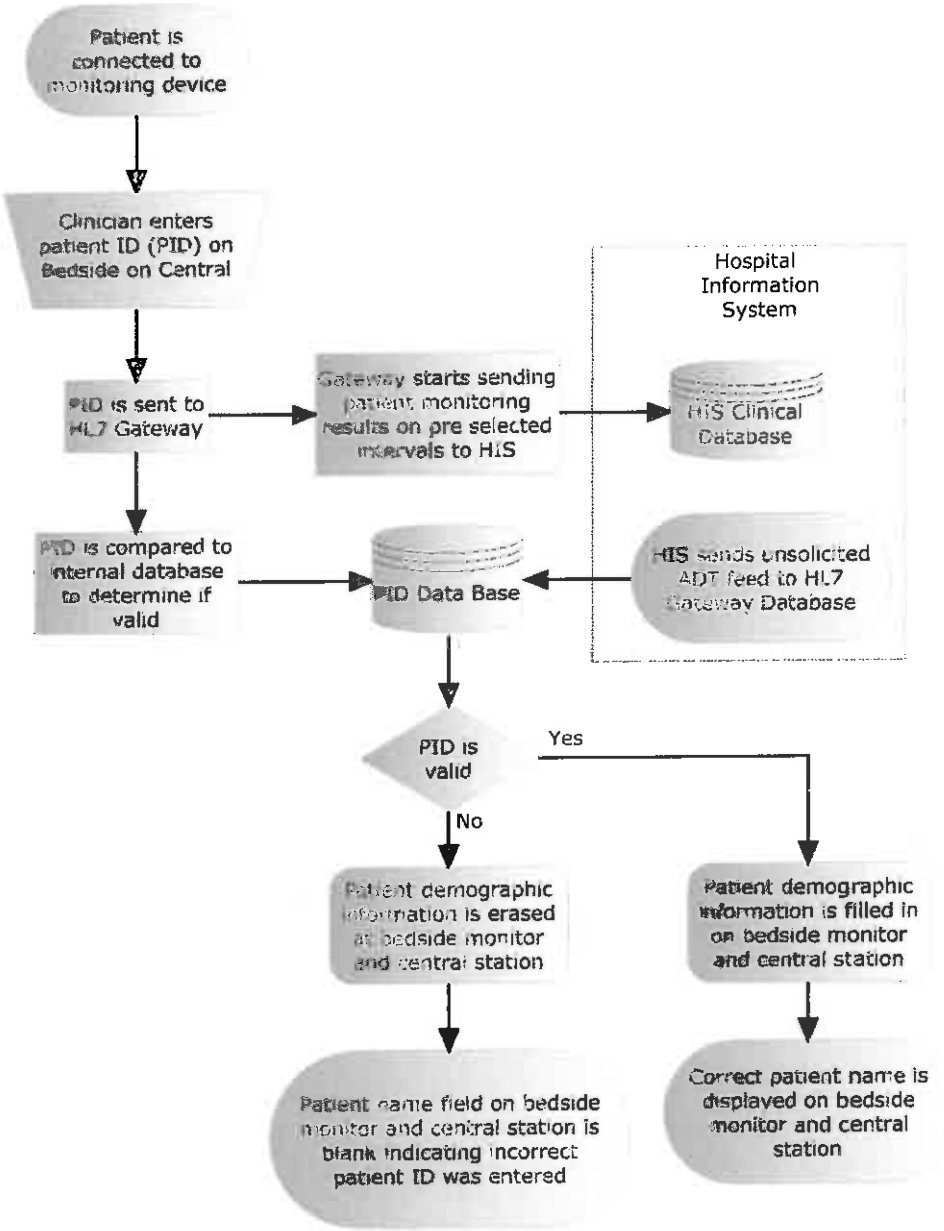
Vital Signs Results Communications
Once a Patient ID number has been entered into either the bedside monitor or central station, vital signs results data transmission will be activated. Two methods are available for transmitting vital sign results data from the patient monitoring network to the HIS (or 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 Nihon Kohden HL7 Gateway server is capable of handling communications from up to 300 Nihon Kohden patient monitoring devices. Each Gateway server is provided with two network interface cards (NIC). One NIC is for connection directly to the Nihon Kohden patient monitoring system network and the second NIC is for connection to the hospital IT network for communications to the Hospital Information System.

Sample Process Flow for Unsolicited ADT Feed and Unsolicited Results System



Data Transfer

Nihon Kohden 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), Nihon Kohden 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 Nihon Kohden ICU, Telemetry, or any other NK monitor that is connected to the network.

Bed-to-Bed Communication

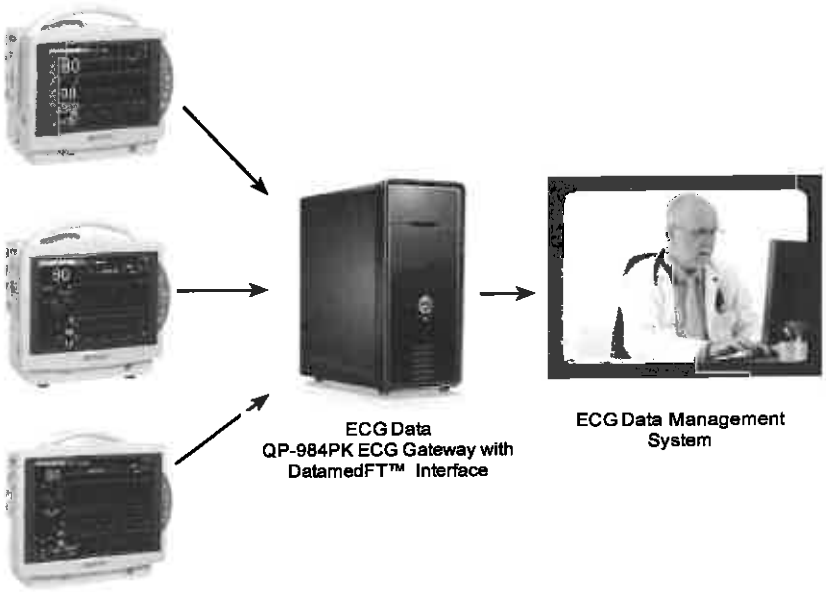
All networked Nihon Kohden bedside monitors can provide bed-to-bed ("interbed") communication, allowing viewing and interaction from any other networked monitor. Up to 16 beds can be viewed from one bedside, including vital signs, waveforms, and alarm notifications.

12-Lead EKG Interface

Nihon Kohden'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 Nihon Kohden'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 Nihon Kohden 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.



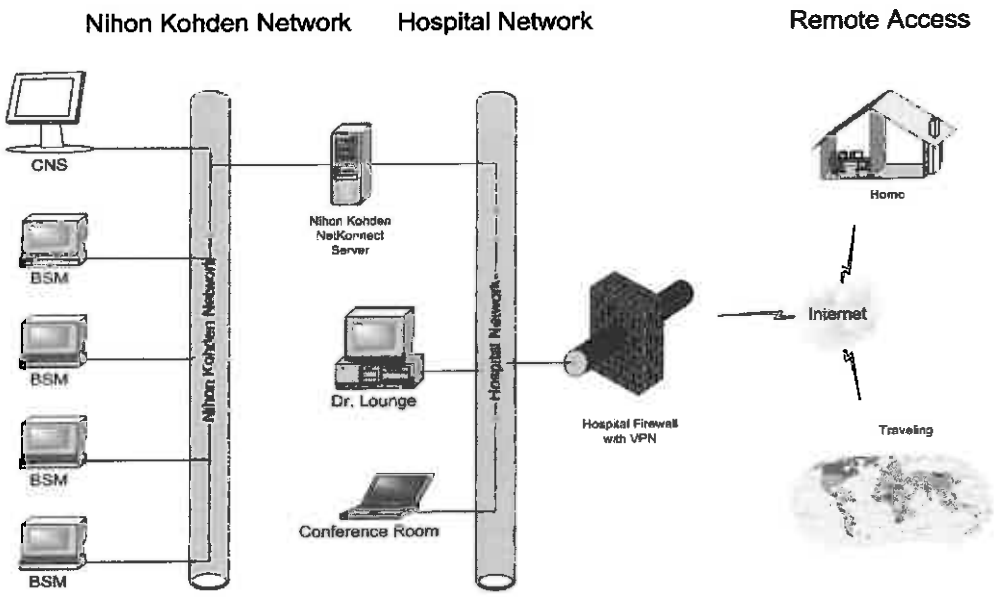
Customers will purchase **DatamedFT™** directly from Engineering Solutions who can be reached at (800) 601-3361 or through their web site at www.engs.com. Current **DatamedFT™** pricing can be found at http://www.datamed.com/pricecal.html. Pricing is subject to change without notice.

Remote Communications

NetKONNECT

NetKonnect is the most advanced remote data access system Nihon Kohden, 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 NetKonnect 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 NetKonnect 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 NetKonnect gateway PC including virus protection, operating system patches, and user ID and password maintenance.

NetKonnect 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. NetKonnect 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 NetKonnect 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. NetKonnect 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.

ReportKonnect

ReportKonnect is an additional capability and an option to Nihon Kohden's remote data access system, NetKonnect. NKA offers a quality assurance application, ReportKonnect, which provides an accurate method to measure the true quality of monitoring care provided with the Nihon Kohden 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. ReportKonnect 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 NetKonnect server, key personnel can be assigned access rights to the monitoring quality reporting capability of ReportKonnect.

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 NetKonnect 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.

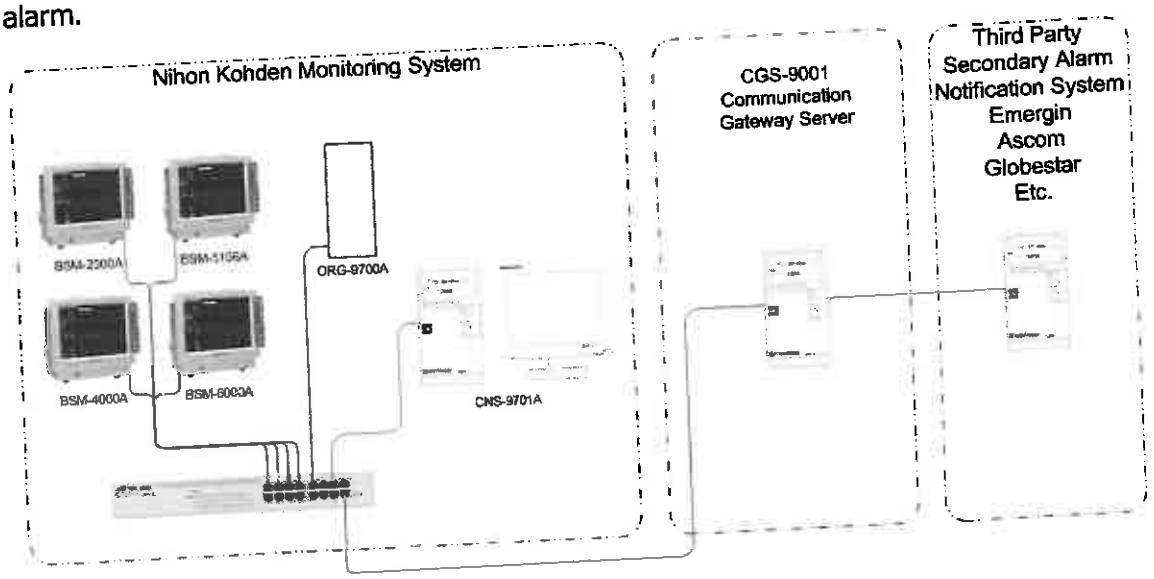
The ViTrac system includes server hardware and ViTrac server software with the ability to register a specific number of users. To clarify, on a 25 user system the hospital can register 25 users who will then be able to access data remotely. The client software for the Apple user devices is available 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 Nihon Kohden monitoring system and forwards them to a third party alarm notification controller system. Currently Nihon Kohden has completed interfaces to the following third party alarm notification controller systems; Emergin, Ascom and Globestar (Connexall). Nihon Kohden 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 Nihon Kohden 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.



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Service

Nihon Kohden 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, NetKonnect, 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, Nihon Kohden 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 Nihon Kohden for any necessary repairs, and will typically be returned in 2-3 days. There is virtually no downtime for repairs.

Nihon Kohden'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.

Warranty

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.

Bedside Warranty Comparison				
Vendor	Nihon Kohden (Standard Warranty)	Competitor 1 (Standard Warranty)	Competitor 2 (Standard Warranty)	Competitor 3 (Standard Warranty)
Year 1	Under Warranty	Under Warranty	Under Warranty	Under Warranty
Year 2	Under Warranty	You pay $$ Out of Warranty	You pay $$ Out of Warranty	You pay $$ Out of Warranty
Year 3	Under Warranty	You pay $$ Out of Warranty	You pay $$ Out of Warranty	You pay $$ Out of Warranty
Year 4	Under Warranty	You pay $$ Out of Warranty	You pay $$ Out of Warranty	You pay $$ Out of Warranty
Year 5	Under Warranty	You pay $$ Out of Warranty	You pay $$ Out of Warranty	You pay $$ Out of Warranty
Total $$	$0	?	?	?

Should a device fail during the warranty period, Nihon Kohden 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.

Explanation of Software Updates

Nihon Kohden 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

Nihon Kohden monitoring products contain proprietary software that is incorporated and/or embedded into the design of the product. Purchase of Nihon Kohden 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 Nihon Kohden.

Training

Nihon Kohden provides free training for both the clinical and bio-medical support staff.

Clinical Training

Nihon Kohden 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:

I. Basic Product Training: Online training programs before, during and after installation.
II. Clinical Resource Development Program: Advanced training for unit-based clinical resource personnel.
III. Transitional Go-Live Support: Live clinical support provided by our RN clinical application specialists.
IV. 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. Nihon Kohden is proud to be the first patient monitoring company to offer basic product training through an e-learning experience prior to go-live. Our coarse 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, Nihon Kohden 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 Nihon Kohden clinical applications specialist.

Transitional Go-Live Support

Nihon Kohden'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, Nihon Kohden'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

Nihon Kohden 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, Nihon Kohden'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:

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

Nihon Kohden's biomedical seminars are intended to familiarize attendees with a working knowledge of the current Nihon Kohden 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.

Additional Value Added Services

Nihon Kohden 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.

Nihon Kohden'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, everything mirroring a turnkey solution 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. As an example, we will soon release an upgrade that will increase our full disclosure storage from 72 hours to 120 hours, and add new alarm management capabilities along with several other new features – some major enhancements that customers will be able enjoy by simply updating their software version. In addition, 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 Nihon Kohden 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 NetKonnect 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 Nihon Kohden 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
Nihon Kohden 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.

****

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

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

Size/Type: 24" color LCD display with touch screen operation

Resolution: 1920 x 1200

Number of Patients: Up to 32 with two displays. 4, 6, 8, 10, 12 or 16 patients per display, selectable

Waveform Display Items (depends on the connected monitor/transmitter): ECG (up to 12 vectors), IBP (1-8), respiration wave, pulse (SpO_2), EEG (1- 2), Flow/Paw, CO_2, external input, Anesthetic gas (O_2, CO_2, N_2O, Agent)

Number of Traces, All Beds Screen: 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

Number of Traces, Individual Bed Screen: Up to 16

Waveform Sweep Speed: 25 mm/s, 50 mm/s, 6.25 mm/s (respiration measurement)

Alphanumeric Display Items (depends on the connected monitor/transmitter): Heart rate, Pulse rate, VPC rate, respiration rate, ST level, IBP (systolic, diastolic, mean), SpO_2, CO_2, Cardiac Output, blood temperature, CCO, CCO<Tb>, CCI, NIBP (systolic, diastolic, mean), temperature, SvO_2, PiCCO, Flow/Paw, N_2O, O_2, Agent, BIS, $tcPC_2$, $tcPCO_2$, TV, MV, PEEP, others.

ALARMS

Alarm Type: Crisis, Warning, Advisory, Technical

Alarm Items (depends on the connected monitor/transmitter): 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, SpO2, SvO2, CCO, ventilator, anesthetic gas, BIS, EtCO2, FiCO2, EtO2, FiO2, N2O, O2, tcPO2, tcPCO2, 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

Alarm Display: Alarm indicator with flashing bed frame and highlighted numerical display and highlighted alarm message

Alarm Recording: Automatic

Alarm Icon/ Arrhythmia Icon: Available when vital sign, technical alarm, or arrhythmia occurs

DATA STORAGE

Graphical Trend: 120 hours, all parameters

Tabular Trends: 120 hours, all parameters, minute-by-minute

Arrhythmia Recall: 1,500 events per bed with 8 second strip.

Full Disclosure: 120 hours, 16 traces per bed

ST Level: 120 hours, minute-by-minute

Hemodynamic List: 256 files per bed

12-lead ECG Analysis Files: 200 files per bed

Event History: 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

Recording Method: Thermal array recording

Number of Waveforms: 3

Paper Speed: 25 mm/sec

Type of Recording: Manual, alarm, periodic, remote

NETWORK LASER PRINTER

HP LaserJet M602DN or equivalent (Postscript printer)

Number of Waveforms: Up to 16

Type of Recording: Manual, periodic

USER INTERFACE

Touch screen, mouse, keyboard and wireless remote controller

POWER REQUIREMENTS

Line/Battery Voltage: AC 100 to 240 V, 50 or 60 Hz

Power Consumption: 180 VA or less

ENVIRONMENT

Operating Temperature: 10° to 35°C

Storage Temperature: –20° to 60°C
VL-931R (–10° to 60°C)

Operating Humidity: 30 to 80 % RH

Storage Humidity: 20 to 90 % RH

Operating Atmospheric Pressure: 70 to 106 kPa

Storage Atmospheric Pressure: 70 to 106 kPa

DIMENSIONS AND WEIGHT

PU-971R Main Unit: 4.5" W x 13.8" H x 15.0" D, 24.2 lbs

E282678 LCD Unit: 23.4" W x 15.7" H x 8.4" D, 24.2 lbs

WS-960P Recorder: 3.2" W x 2.9" H x 6.7" D, 1.6 lbs

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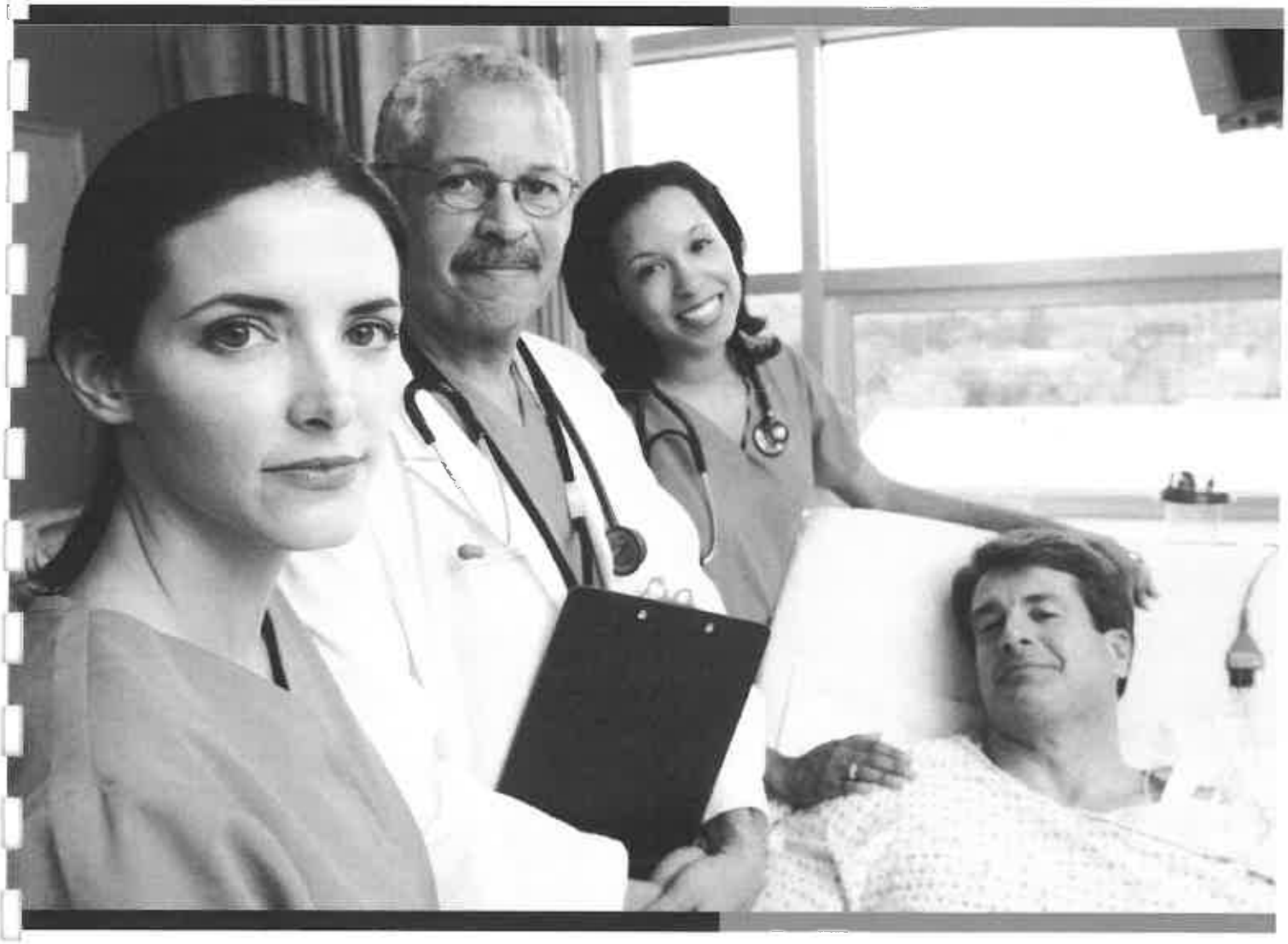
MMD-053 "A1" – CO-0247

TR-6000 Series Bedside Monitors

One standard of care across the continuum of care.



Nihon Kohden America

Different thinking for better Healthcare.

Every patient is a high acuity patient.

That's why every detail matters.

Hospitals and medical professionals are being forced to do more with less in today's healthcare environment—creating the demand for innovative technology that assists them at unprecedented levels.

Smart Modular Cable
Guards against obsolescence and greatly reduces cost

BSM-1700 with
Data Acquisition Unit

Nihon Kohden America began a quest several years ago to help hospitals save lives and avoid costs. Our products are based on our core philosophy of using innovative technology to improve patient outcomes and drive core business improvements.

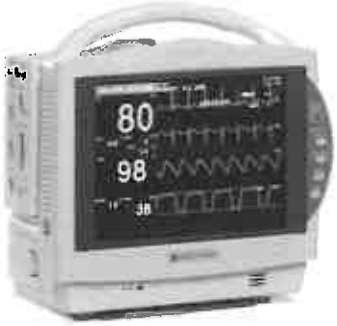
> Improving quality always reduces costs, but reducing costs never improves quality.

Miniaturization, flexibility, enhanced user experiences and improved quality are the hallmarks of Nihon Kohden products. Together they give customers the lowest total cost of ownership and the greatest value of any monitoring solution.

Redefining transport

With today's high acuity patients it is important to maintain a high standard of monitoring care, even during transport. The unique design of Nihon Kohden's BSM-1700 Transport monitor and the Data Acquisition Unit redefines transport monitoring. Simply disconnect the BSM-1700 Transport monitor from the Data Acquisition Unit or from the TR-6000 monitor and your patient can be transported with all monitoring capabilities remaining the same. When the patient is transferred to their new care setting and the BSM-1700 is reconnected, patient information, including full disclosure, is uploaded to the new bedside display creating one seamless patient record.

One additional benefit of the Data Acquisition Unit is that it can be extended via an umbilical cord to be located on a bed rail, gurney or IV pole next to the patient. This alleviates the hassles associated with cable management at the bedside. Since it contains user function keys, it can be placed on either side of the patient for optimal clinical workflow efficiency.



Raising the standard of care for all monitored patients.

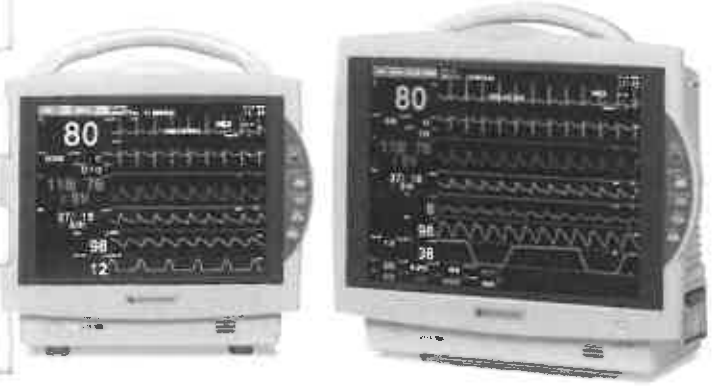
Every patient deserves the highest standard of care. Developed in response to the needs of clinicians, the TR-6000 Series monitors offer an affordable approach to providing nurses, physicians and other clinicians the most comprehensive monitoring information available in a bedside monitor today.

The TR-6000 Series gets its name from the concept of Total Recall—it's the only line of fully featured bedside monitors that retain the patient's monitored 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.

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. Often times, these costly options are eliminated before the purchase to meet budgetary constraints. When this happens, who suffers? The clinician, but most importantly the patient.

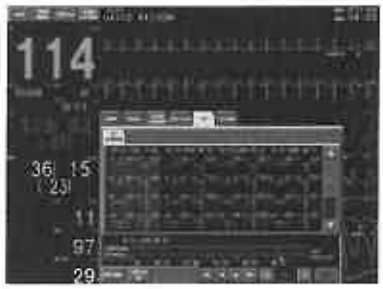
In contrast, the TR-6000 Series includes these valuable software features at no additional charge: full disclosure, comprehensive arrhythmia analysis and recall, diagnostic 12-lead ECG, 12-lead ST segment analysis and recall, drug calculations, hemodynamic calculations, and pulmonary calculations, just to mention a few.

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



10", 12" or 15" monitor options

Full Disclosure—The TR-6000 Series provides storage and review capabilities within the bedside monitor that are typically found only in a central station. It is the full disclosure waveform that allows you to confirm or reject the alarm and numeric findings and to make treatment decisions based on more accurate monitored data.

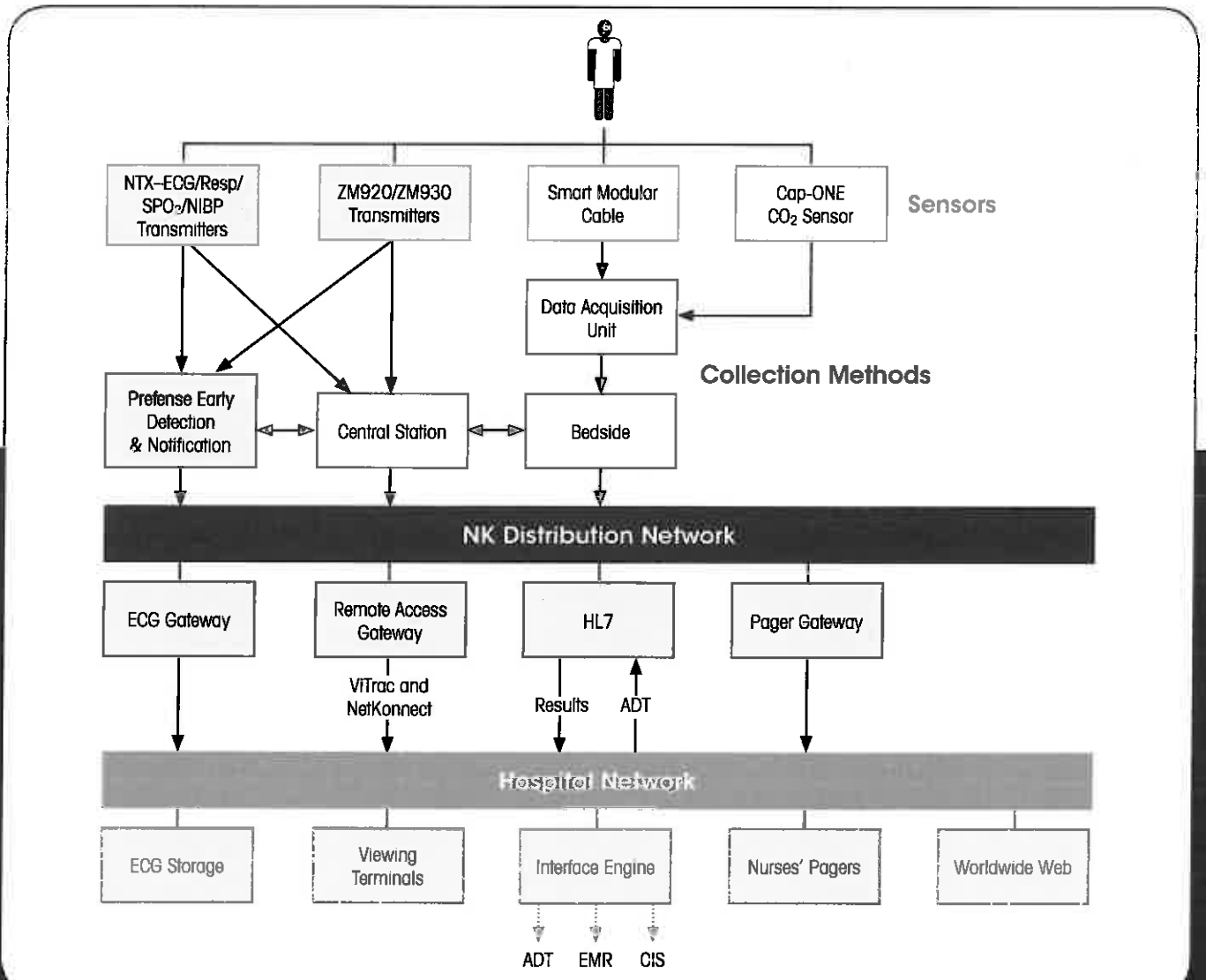


ST Template—Multi-lead ST segment monitoring provides you with continuous oversight to transient changes in your patients' cardiac condition. They are stored minute-to-minute in the monitor for comparison.

Arrhythmia—The TR-6000 Series provides the newest high accuracy multi-lead arrhythmia detection system in the industry. Unlike many bedside monitors with limited storage capability, the TR-6000 stores over 16,000 arrhythmia events that are time-linked to the full disclosure waveforms to determine what led up to, and what followed, the captured event.

Enterprise Monitoring solution

Nihon Kohden's Enterprise Monitoring Solution uses extremely advanced, yet cost-effective technology to provide clinicians with the critical data they need when and where they need it. Empowering clinicians with information results in quicker interventions and better quality outcomes. Defensive Monitoring fills the void left by traditional monitoring companies. Now you can afford 24/7 monitoring for every patient truly across the enterprise.



Talk to your Nihon Kohden representative to learn more about our complete solution for enterprise monitoring, or visit www.nkusa.com/monitoring.

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90869 Rev A

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, Va, Vb)

Input Range: ±10 mV or more

DC Offset Tolerance: ±500 mV or more

Input Impedance: 5 MΩ or more

QRS Detection: amplitude ≥ 0.5 mV

Heart Rate Counting Range: 0, 15 to 300 beats/min

Heart Rate Counting Accuracy: ±2 beats/min

RESPIRATION MEASUREMENT

Measuring Method: Impedance method

Measuring Vector: Between RA and LL

Impedance Range: 220 to 2,000 Ω

Resp Rate Measuring Accuracy: ±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

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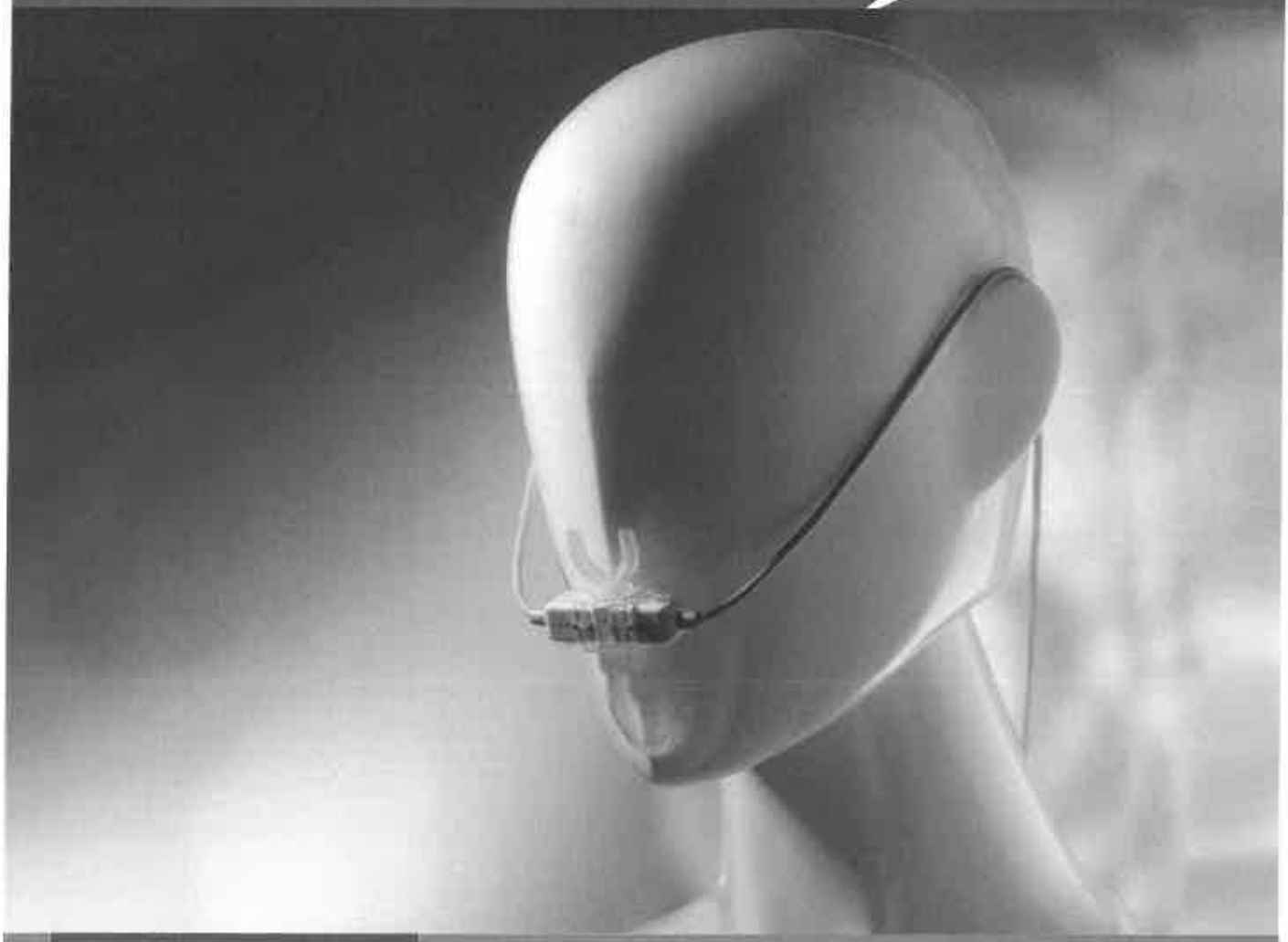
Cap-ONE CO_2 Sensor
TG-920P



A Whole New Way of Looking at Capnography Monitoring

- Mainstream technology CO_2 monitoring for both intubated and non-intubated patients
- Smart modular cable technology is compatible with Nihon Kohden bedside monitors and stand-alone Cap-STAT monitors
- Simple operation with no warm-up time or calibration needed

NIHON KOHDEN www.nkusa.com

Different Thinking for Better Healthcare.

Cap-ONE CO_2 Sensor
TG-920P

If you're prescribing CO_2 monitoring, shouldn't it work under all conditions?

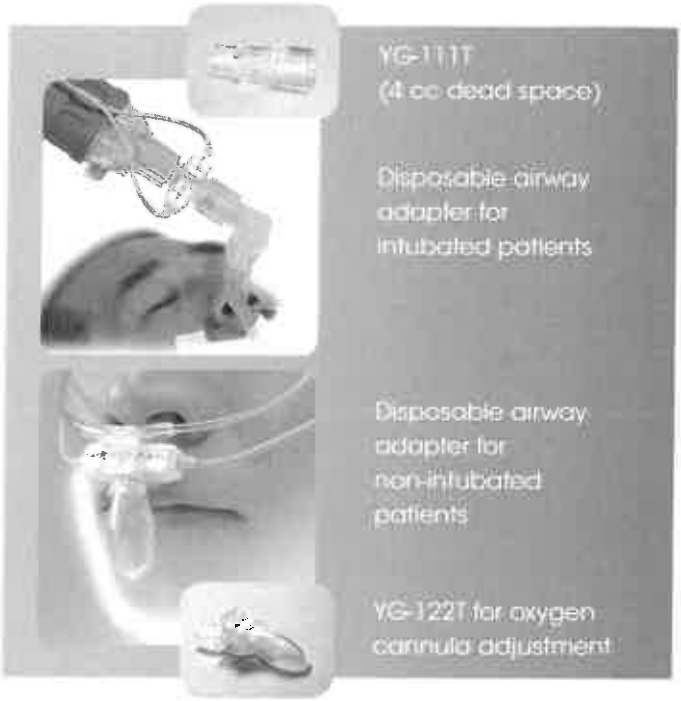
Whether your patients are oral or nasal breathers, in need of short or long-term monitoring or under high-humidity conditions, they require and deserve reliable capnography monitoring.

Now you can achieve the results you need with Cap-ONE, The world's 1st mainstream CO_2 sensor specifically designed for intubated or non-intubated patients.

Using advanced miniaturization and sensor technology, we have substantially reduced the size of our traditional mainstream sensor.

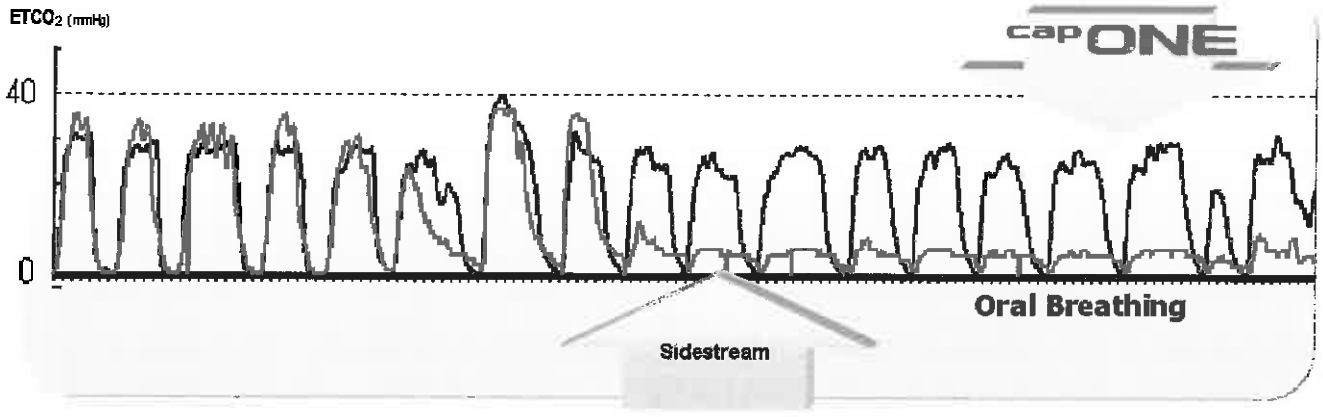
This new sensor is attached to a disposable oral and nasal adaptor and placed directly at the point of expiration.

Therefore, you can achieve the same level of quality and reliability found in traditional mainstream CO_2 technology monitoring and apply these benefits to intubated or non-intubated patients without any of the hassle and cross-contamination concerns found in traditional sidestream technology.



Clinical research has demonstrated that Cap-ONE proves to be more effective in capnography monitoring for non-intubated patients than traditional sidestream technology, as shown below.

Cap-ONE delivers safe and accurate capnography monitoring with virtually no delay in data sampling and minimal discomfort to your patients.



Patient starts breathing partially with mouth.

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MSW-0102 [E]-CO-1234

CGS-9002 Platinum HL7 Bi-Directional Interface

System Compatibility

The following is a partial list of the Electronic Medical Record systems and Interface Engines that Nihon Kohden has successfully connected to using the CGS-9002 Platinum HL7 Gateway system.

Acuitec
Allscripts
Capsule Tech
Cerner
Clinicomp
CPSI
Eclypsis
Epic
Essentris
GE Healthcare
HMS
IHE Compliant PCD
iSoft
McKesson
Medi-tost
Meditech
NextGen
PICIS
Quadramed
Siemens
Teges
TIBCO
Veterans' Health VistA
Philips Medical
VISICU

Flexible Bi-Direction HL7 Gateway facilitates easy integration between a Nihon Kohden Monitoring system and a hospital Electronic Medical Record system

- Provides outbound vital signs from a Nihon Kohden patient monitoring system to almost any HL7 compliant Electronic Medical Record system.
- Inbound ADT capability simplifies patient admission and helps insure accuracy of patient demographics.
- Utilizes an integrated Interface Engine that enables easy exchange of electronic information with HL7 complaint EMR systems.
- Patient monitoring system's time is synchronized with the hospital network time server insuring the time and date at the monitoring system is always correct.
- Experienced Nihon Kohden integration team provides professional services to complete system integration between the HL7 Gateway and the hospital's EMR system.

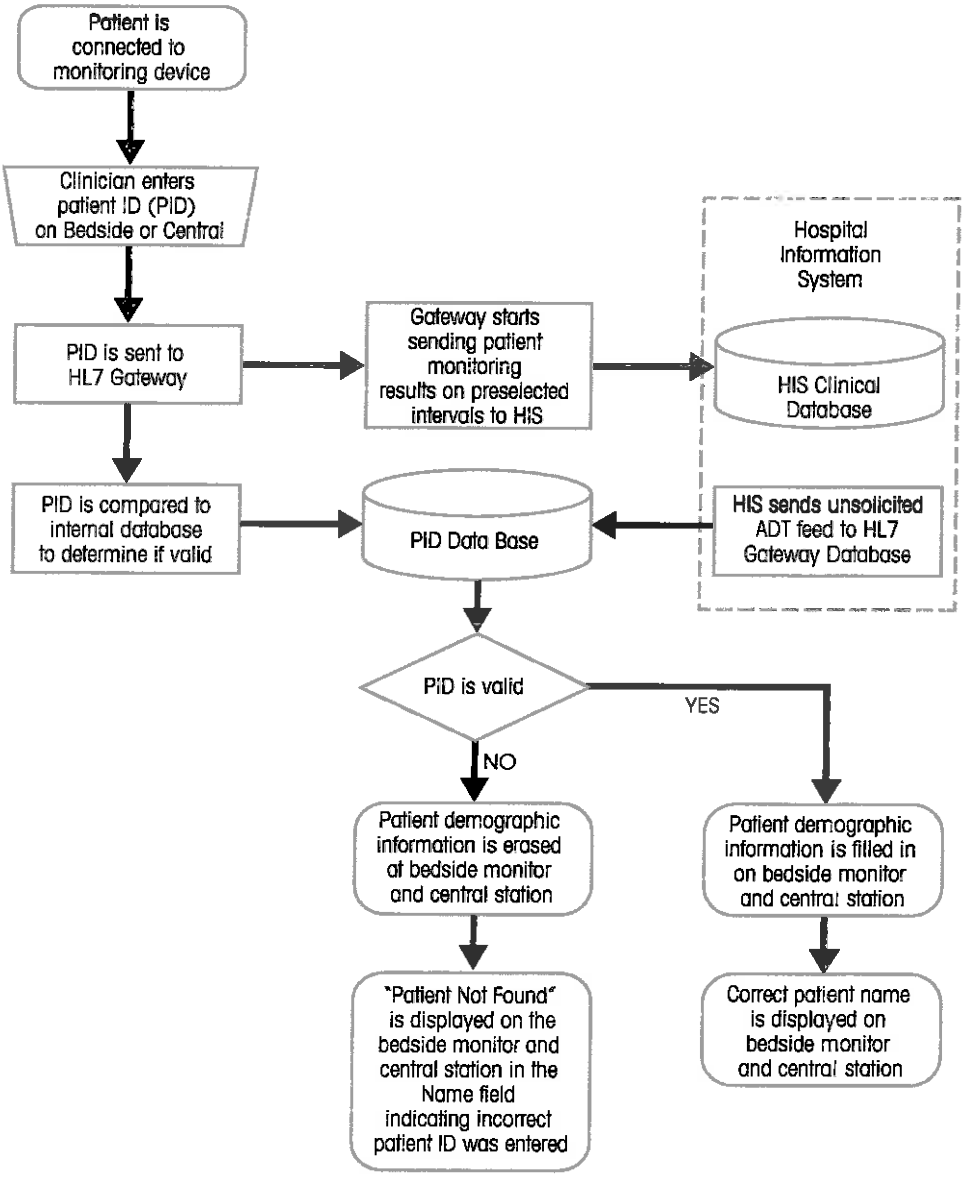
Nihon Kohden America

Different thinking for better Healthcare.

www.nkusa.com/monitoring

System Overview

Nihon Kohden's Platinum HL7 Gateway Interface includes software, hardware and professional services to facilitate the transfer of Patient Admission, Discharge and Transfer data (ADT) and Vital Signs Results messages between a Nihon Kohden monitoring system and almost any HL7 compliant Electronic Medical Record system. The CGS-9002 Platinum HL7 Gateway has been designed to communicate using industry standard HL7 2.3 ADT, ORU, and ORF messages.



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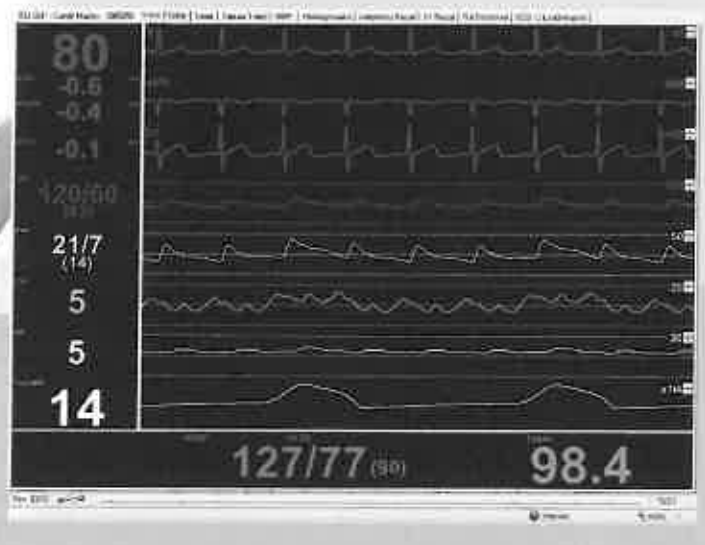
Document #90630 Rev A

Remote Access System
QP-983P NetKonnect



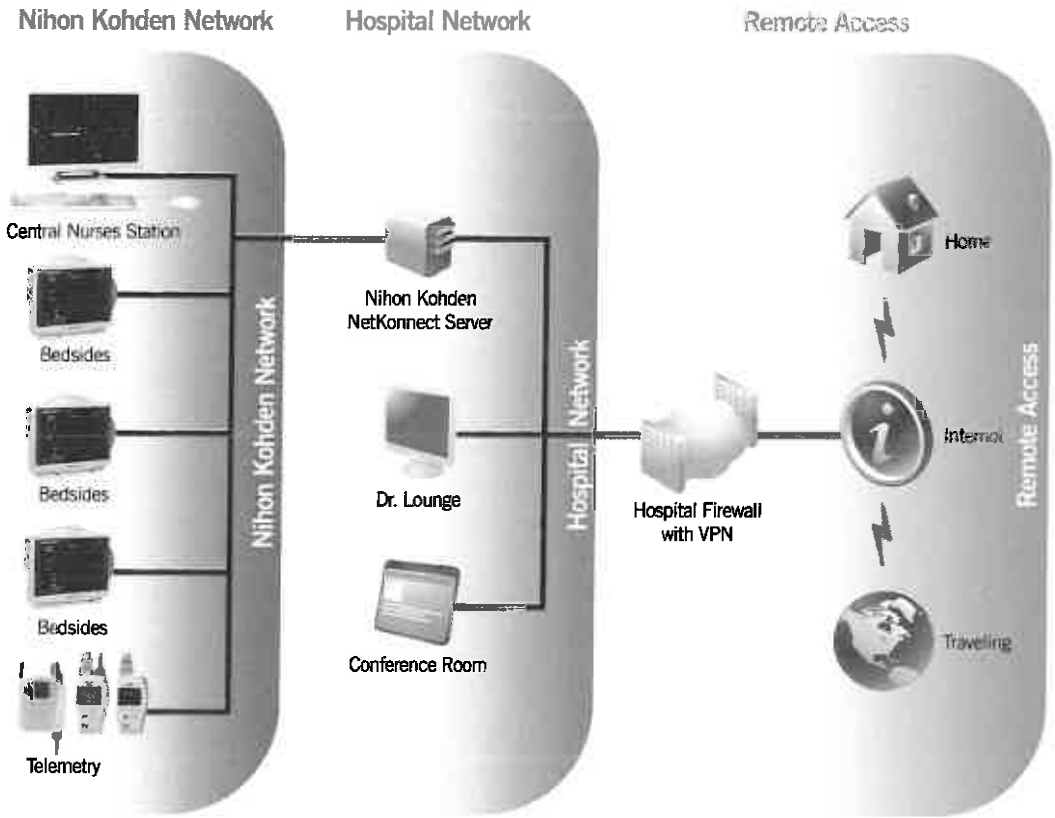
Comprehensive Web-based Application Provides a Portal to Your Monitored Patients

- HIPPA compliant secured access for local or remote users
- Individual nurse review stations
- Remote physician and nurse access
- Near real-time waveform and numerics with user selectable settings for customized views
- Interactive and time-linked monitoring data:
  - Graphical and Tabular Trends
  - Hemodynamic Calculations
  - Arrhythmia Recall Events
  - Minute-to-minute ST Templates
  - Multi-Parameter Full Disclosure Waveforms
  - Interpretative 12-lead ECGs

Remote Access System
QP-983P NetKonnect

NetKonnect provides you with the information to make clinical decisions when timing is critical.

The QP-983P NetKonnect Remote Access Server provides a secure portal between the Nihon Kohden patient monitoring system and your hospital's network. You can use most web-enabled computers* to access this data both locally and remotely. Once you access the hospital's network, simply click on the NetKonnect desktop icon to log on with your user name and password. Only authorized users are allowed to access this data.



Convenient access to patient data leads to improved patient outcomes.

- Clinicians have access to their patients' current and stored monitoring data from within the hospital, from their offices or from their homes.
- NetKonnect provides immediate access to patient data so that physicians can complete their clinical assessment before ordering interventions. This results in improved decision-making, improved patient outcomes and physician satisfaction.
- NetKonnect makes the charting function more efficient by allowing clinicians to view physiologic data in conjunction with the electronic chart instead of requiring them to go to a central location for this purpose.
- HIPPA compliant secured access insures that only authorized personnel have access to patient data.

*Requires Internet Explorer 5.1 or later and .Net Framework 1.1 or later

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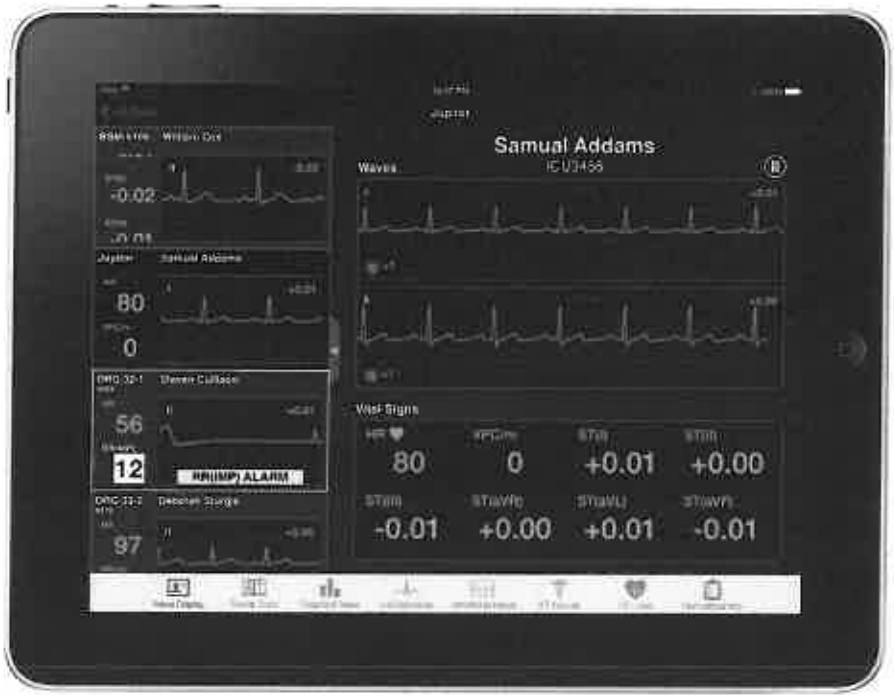
ViTrac



Connect Anywhere Anytime

Your patient, and the providers who deliver 24 hour care, trust you to be there when they need you most, especially when it is vital. Secure remote access to patient data can support timely diagnosis and intervention.

The ViTrac™ mobile application provides a secure method for monitoring and viewing a wide range of Nihon Kohden generated patient data. Patient data can be viewed in near real-time on Apple's mobile iOS devices within the hospital network or remotely, via a VPN connection. The mobile application provides a robust and easy to use interface which allows users to see current waveforms, vital signs, stored data and much more.

ViTrac

FEATURES

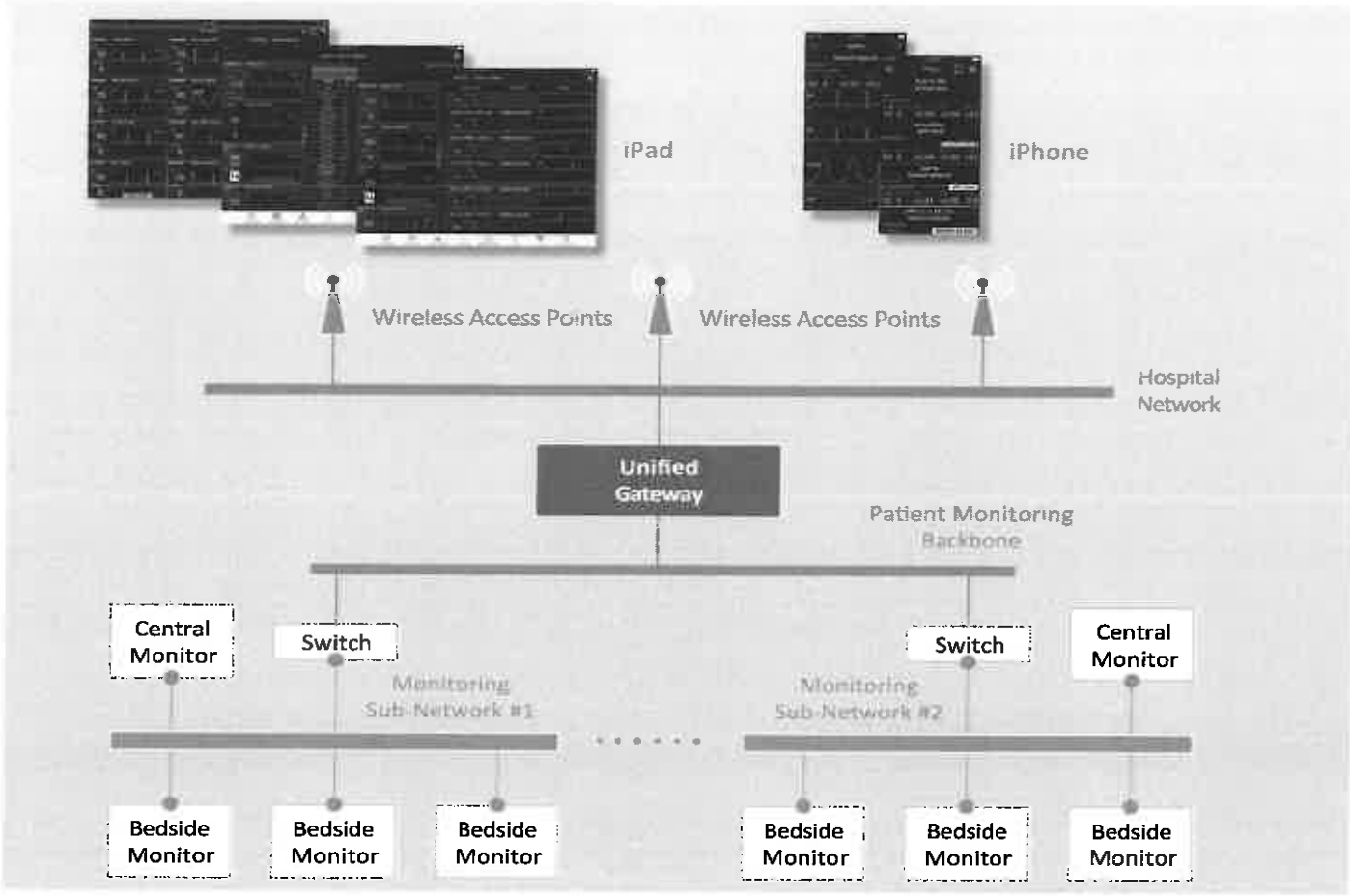
- Secured access for local or remote users
- Near real-time waveform and numerics with user selectable settings for customized views
- Interactive and time-linked monitoring data: Graphical and tabular trends, Hemodynamic calculations, Arrhythmia events, Minute-to-minute ST templates, Multi-parameter full disclosure waveforms, Interpretative 12-lead ECG's
- Continuously and simultaneously display data for up to 12 patients on iPad devices and 8 patients on iPhone devices

ViTrac empowers clinicians with information that supports timely interventions and quality of care.

ViTrac uses Nihon Kohden's Unified Gateway technology that is designed with multi-level security controls that restricts access to patient data based on user, user groups and/or mobile client.

COMPATIBLE WITH THE FOLLOWING MOBILE DEVICES:

- Apple iPad, 2nd generation or higher, running iOS 6.1 or higher
- Apple iPad mini, 1st generation or higher, running iOS 6.1 or higher
- Apple iPhone 4 or higher, running iOS 6.1 or higher
- Apple iPod touch, 4th generation or higher, running iOS 6.1 or higher



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