The following documentation is an electronically-submitted vendor response to an advertised solicitation from the *West Virginia Purchasing Bulletin* within the Vendor Self-Service portal at ***wvOASIS.gov***. As part of the State of West Virginia's procurement process, and to maintain the transparency of the bid-opening process, this documentation submitted online is publicly posted by the West Virginia Purchasing Division at ***WVPurchasing.gov*** with any other vendor responses to this solicitation submitted to the Purchasing Division in hard copy format.

Header 1

List View

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

Procurement Folder: 1985423

Procurement Type: Central Purchase Order

Vendor ID: VS0000052811

Legal Name: LINEV Systems US, Inc.

Alias/DBA: LINEV Systems US, Inc.

Total Bid: $114,167.00

Response Date: 06/23/2026

Response Time: 13:14

Responded By User ID: linevsystemsus

First Name: Cody

Last Name: Reinhardtsen

Email: sales@linevsystems.com

Phone: 9365882064

SO Doc Code: CRFQ

SO Dept: 0306

SO Doc ID: GEO2600000002

Published Date: 6/16/26

Close Date: 6/23/26

Close Time: 13:30

Status: Closed

Solicitation Description: Benchtop Powder X-Ray Diffraction Instrument

Total of Header Attachments: 1

Total of All Attachments: 1

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

State of West Virginia
Solicitation Response

Proc Folder:	1985423
Solicitation Description:	Benchtop Powder X-Ray Diffraction Instrument
Proc Type:	Central Purchase Order

Solicitation Closes	Solicitation Response	Version
2026-06-23 13:30	SR 0306 ESR06222600000008909	1

VENDOR

VS0000052811
LINEV Systems US, Inc.

Solicitation Number: CRFQ 0306 GEO2600000002

Total Bid: 114167 **Response Date:** 2026-06-23 **Response Time:** 13:14:31

Comments:

FOR INFORMATION CONTACT THE BUYER
Larry D McDonnell
304-558-2063
larry.d.mcdonnell@wv.gov

Vendor
Signature X **FEIN#** **DATE**

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

Line	Comm Ln Desc	Qty	Unit Issue	Unit Price	Ln Total Or Contract Amount
1	Benchtop Powder XRD Instrument	1.00000	EA	114167.000000	114167.00

Comm Code	Manufacturer	Specification	Model #
41102704			

Commodity Line Comments:

Extended Description:

See attached documentation for further details.

Tuesday, June 23, 2026 at 1:30PM EDT

LUKAS RICHTER
LINEV Systems US, Inc.
13631 Poplar Circle, Conroe, TX 77304
✆ 936 - 588 - 2064
www.linevsystems.com

Benchtop Powder X-Ray Diffraction Instrument
Bid # CRFQ GEO26*02
Geological & Economic Survey
1 Mont Chateau Rd
Morgantown, WV 26508
Tuesday, June 23, 2026 at 1:30 PM EDT

Larry D McDonnell
Bid Clerk, State of West Virginia
2019 Washington St E
Charleston, WV 25305
larry.d.mcdonnell@wv.gov
304.558.2063

COVER LETTER

State of West Virginia
Purchasing Division
2019 Washington St E
Charleston, WV 25305
Larry D McDonnell

RE: State of West Virginia Benchtop Powder X-Ray Diffraction Instrument

Dear Mr. McDonnell:

LINEV Systems US, Inc., a world leader in the design and supply of security, medical, and scientific X-Ray systems, is pleased to submit the attached response to the subject Request for Bid. LINEV Systems leverages world-class scientists and software developers to deliver X-ray imaging products and analytical solutions.

Founded in 2006, LINEV Systems Inc. has almost 20 years of experience in X-ray imaging with over 1500 installations in the United States and more than 4,000 equipment installations worldwide.

LINEV Systems is a certified U.S. small business and the exclusive source for LINEV products in the United States of America. We develop and proudly distribute our industry-leading imaging systems in Conroe, Texas to meet today's security challenges with the innovation and quality to perform in tomorrow's world.

In this submission, LINEV Systems proposes the TELLUS benchtop X-ray diffractometer for reliable crystallographic and materials analysis. Designed for routine laboratory applications in research and educational environments, the system is well suited to support the analytical needs of the Geological & Economic Survey.

TELLUS BASIC integrates a precision vertical θ–θ goniometer with standard diffraction detection and the TellusCon control interface with ALMAZ data analysis software to provide accurate and repeatable diffraction measurements. Its compact, fully enclosed design ensures safe, dependable operation while offering a practical and cost-effective solution aligned with the functional requirements of this request.

Thank you for your time and consideration. We look forward to further discussing our proposal, and demonstrating the solutions highlighted above, with the State of West Virginia, for the Geological & Economic Survey. If you require further information or clarification of any elements of our proposal, please contact me via email or telephone.

Best regards,

Lukas Richter
Director of Business Development
E-mail: lrichter@linevsystems.com
Phone: 854.205.757

GENERAL REQUIREMENTS

3.1.1 Benchtop Powder XRD Instrument

Ref	Requirement	Compliant
3.1.1.1	X-Ray Diffractometer (XRD), to be used for qualitative and quantitative phase analysis of polycrystalline materials in rock samples. Must be powder XRD and not single crystal.	**Comply.**
3.1.1.1	The diffractometer must be new, benchtop design.	**Comply.**
3.1.1.1	Must use American standard electrical power (110–120 V).	**Comply.**

3.1.1.2 Software and System Specifications

Ref	Requirement	Compliant
3.1.1.2	System software must perform phase identification, quantitative analysis, crystal structure, and Rietveld Refinement at minimum.	**Comply.**
3.1.1.2 (1)	Benchtop XRD system must operate at a minimum of 600 W and not exceed 1,200 W using a standard Cu XRD tube.	**Comply.**

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Ref	Requirement	Compliant
3.1.1.2 (2)	System must have a continuously variable divergence slit that keeps irradiated area constant over full 2θ range.	**Comply.**
3.1.1.2 (3)	System must include a high-speed silicon strip detector capable of suppressing fluorescence effects of Fe, Co, Mn, or Ni.	**Comply.**
3.1.1.2 (4)	System must come with extended crystalline database such as ICDD PDF2, PDF4+ and other PDF4s, as well as a Crystallography Open/Online Database. One license required for minimum one year.	**Comply.**
3.1.1.2 (5)	System must have a sample changer with spinning capability that can be easily removed or added by the user.	**Comply.**
3.1.1.2 (6)	Accessories should include a reference specimen, Ni Kβ filter for Cu radiation, and an anti-scatter protector at minimum.	**Comply.**

3.1.1.3 Warranty

Ref	Requirement	Compliant
3.1.1.3	Benchtop X-Ray Diffractometer must be covered under an extended warranty agreement for a minimum of one year.	**Comply.**

Technical Proposal # 221

A COMPACT, RELIABLE, AND VERSATILE SOLUTION FOR EDUCATION AND ROUTINE ANALYSIS

TELLUS BASIC

Date Issue:
June 2026

Valid Until:
July 2027

info@linevsystems.com
www.linevsystems.com

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✆ 936-588-2064
13631 Poplar Circle, Conroe, Texas 77304

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2. LEGAL DISCLAIMER

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All images included in this document are for reference purposes only and may not accurately represent the actual quality, resolution, or specifications of the products. Due to the limitations of printed materials and digital formats such as PDFs, visual details may differ from those of the original product. For precise representations, please refer to official product samples or request high-resolution images from LINEV Systems®.

As part of our commitment to continuous product development and improvement, LINEV Systems® reserves the right to modify product designs and specifications at any time without prior notice. To ensure accuracy and alignment with the latest technical standards, please request an up-to-date technical proposal before placing an order.

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3. TECHNICAL OVERVIEW

GONIOMETER	Theta/Theta vertical, radius 150 mm
SCANNING RANGE	-6˚ +154˚(2θ)
MINIMAL STEP	0.0003˚(2θ)
SCANNING SPEED	0.01-600˚/min
X-RAY GENERATOR	40 kV, 15 mA (600 W) or 30 kV, 10 mA (300 W)
COOLING SYSTEM	Internal closed-circuit water cooling
DETECTOR	ADVACAM MiniPIX TPX 3 or DECTRIS Mythen2 R 1D [2D (256 x 256) or 1D (640)] photon counting Si detector
POSITIONING ACCURACY	±0.01˚ (2θ)
MIN. ACHIEVABLE PEAK WIDTH	≤0.05˚

4. PRODUCT OVERVIEW

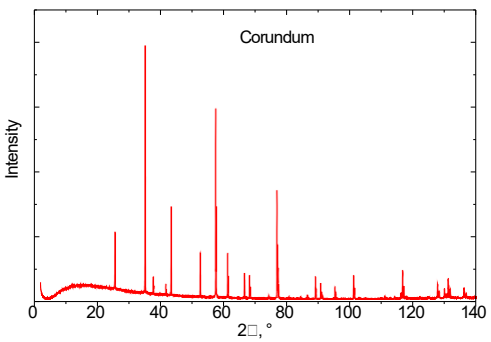
The **TELLUS Basic** X-ray Diffractometer is a versatile and user-friendly benchtop XRD system, specifically designed for educational institutions and routine industrial applications. With its intuitive operation, high precision, and compact footprint, it provides an ideal entry point for students, researchers, and laboratory professionals seeking reliable crystallographic analysis of powder materials.

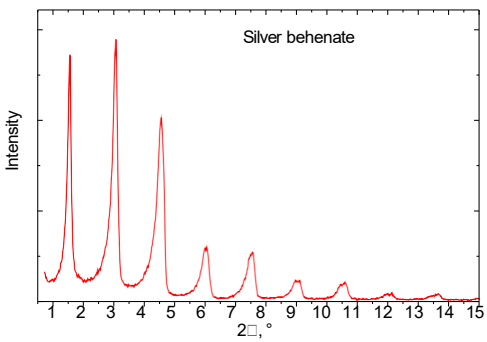
An Essential Tool for Education

For academic institutions, the **TELLUS Basic** serves as an invaluable tool for teaching fundamental X-ray diffraction techniques. Its straightforward design and automated workflow make it accessible to students, allowing them to gain hands-on experience in crystal structure determination, phase identification, and material characterization. The system's ability to handle up to 8 samples at a time enhances the learning process, enabling batch analysis for classroom demonstrations and research projects.

Reliable Performance for Routine Industrial Analysis

Beyond the classroom, the **TELLUS Basic** is an excellent choice for routine powder diffraction analysis in industrial laboratories. Industries such as cement, mining, chemicals, and metallurgy rely on precise phase identification and quality control to ensure product consistency and regulatory compliance. The **TELLUS Basic** delivers accurate, reproducible, and high-resolution diffraction data, making it an indispensable instrument for process control, material verification, and research & development in manufacturing environments.





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Seamless Integration and Low Maintenance

Designed to fit effortlessly into any laboratory, the **TELLUS Basic** features a benchtop configuration that maximizes space efficiency. It requires minimal maintenance, thanks to its integrated closed-loop water cooling system, and is powered by a standard single-phase electrical connection, eliminating the need for specialized infrastructure. The system's robust safety mechanisms, including multi-level radiation shielding and automatic shutdown features, ensure a secure operating environment for both educational and industrial users.

With its combination of simplicity, accuracy, and reliability, the **TELLUS Basic** stands out as a leading choice for educational and industrial laboratories, fostering scientific discovery and process optimization in X-ray powder diffraction analysis.

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5. KEY FEATURES AND ADVANTAGES

Intuitive and Easy-to-Use:

- Ideal for students and entry-level researchers learning X-ray diffraction techniques
- Simple workflow with automated calibration and pre-configured scanning modes

Compact and Energy-Efficient Design:

- Small benchtop footprint fits into any laboratory space
- Low power consumption and an integrated closed-circuit water-cooling system for minimal maintenance

Reliable Data with High Accuracy:

- Theta/Theta vertical goniometer for precise powder diffraction measurements
- Scanning range of -6° to +154° (2θ) with a minimal step size of 0.0003° (2θ)

Versatile Sample Handling:

- Supports single and multi-sample analysis (up to 8 samples)
- Compatible with a range of sample holders, including those for powdered, solid, and free-flowing materials

Advanced Detection Capabilities:

- Equipped with ADVACAM MiniPIX TPX3 (2D) or DECTRIS Mythen2 R 1D (1D) photon-counting detectors for superior sensitivity and resolutions

HOW TELLUS BASIC STANDS OUT FROM OTHER ENTRY-LEVEL XRD SYSTEMS:

Superior optical geometry
Unlike conventional θ-2θ configurations, the θ-θ design provides enhanced stability, reducing errors and improving data consistency
Accurate measurements
The 0.0003° (2θ) minimal step size and ±0.01° (2θ) positioning accuracy exceed industry standards for benchtop XRD systems
Efficient sample processing
Capable of handling up to 8 samples at once, significantly increasing productivity compared to single-sample systems
Cutting-edge detector technology
Features 1D and 2D photon-counting detectors, offering faster data collection and higher sensitivity than many entry-level XRD systems

6. SYSTEM ARCHITECTURE

DETECTORS SPECIFICATIONS		
	DECTRIS MYTHEN2 R 1D	ADVACAM MINIPIX
Pixel size	50 μm by 8 mm	55x55 μm
Type / number of pixel	Linear 1D / 640	2D Array/ 256x256
2θaperture	12 deg.	12 deg.
Energy dispersion mode	Single threshold	Two-threshold
Cooling	AIR	AIR

Comprehensive Software Suite:

- TellusCon operator software for intuitive control and seamless operation
- ALMAZ data analysis software for qualitative and quantitative phase analysis, peak detection, and crystallite size determination

Safety-First Design:

- Multi-layer radiation shielding for complete operator protection
- Automatic emergency shutdown if system irregularities are detected

The TELLUS Basic operates using a θ-θ Bragg-Brentano optical geometry, where the X-ray source and detector rotate synchronously around a stationary sample. This configuration is optimized for routine powder analysis, ensuring high-precision diffraction measurements.

7. OPERATING PRINCIPLE

1. **Sample Preparation & Placement:** Users load powdered or solid samples into the holder. The system supports batch sample processing to streamline workflows.
2. **Scanning & Data Collection:** The goniometer rotates the X-ray tube and detector synchronously to record diffraction patterns.
3. **Data Analysis & Interpretation:** The ALMAZ software suite processes the diffraction data, enabling users to identify phases, analyze crystallite size, and refine lattice parameters.
4. **Results & Reporting:** Automated reporting tools generate detailed phase analysis summaries, supporting academic research and industrial quality control.

8. SAFETY & RADIATION PROTECTION

User safety is our top priority. **TELLUS Pro** advanced radiation protection creates a secure working environment for all operators. The diffractometer features reliable stationary X-ray shielding combined with a multi-level electronic security system, effectively eliminating direct radiation exposure. The automatic safety system is designed with multiple layers of protection. It includes clear warning lights, audible alarms, and emergency stop switches, along with sophisticated detection mechanisms for any irregularities in tube voltage, current, or generator overloads.

In the event of an accidental door opening during scanning, the **TELLUS Pro** safety system instantly shuts off X-ray emission and activates the X-ray warning lamp, ensuring immediate awareness. Importantly, X-ray radiation is only enabled when the machine's case door is properly closed, guaranteeing that safety protocols are strictly followed throughout every scan. **TELLUS Pro** is engineered to minimize the ambient radiation dose rate, maintaining levels well below 1 μSv/h at any accessible point within 0.1 m from the device's exterior under all operational conditions.

With **TELLUS Pro** XRD, users can fully focus on research, knowing that their safety is well protected.

9. SOFTWARE

TELLUS XRD is controlled by the **TellusCon** software ensuring smooth device operation.

KEY FEATURES OF TellusCon OPERATOR SOFTWARE

DIAGNOSTICS AND MAINTENANCE OF THE DIFFRACTOMETER:

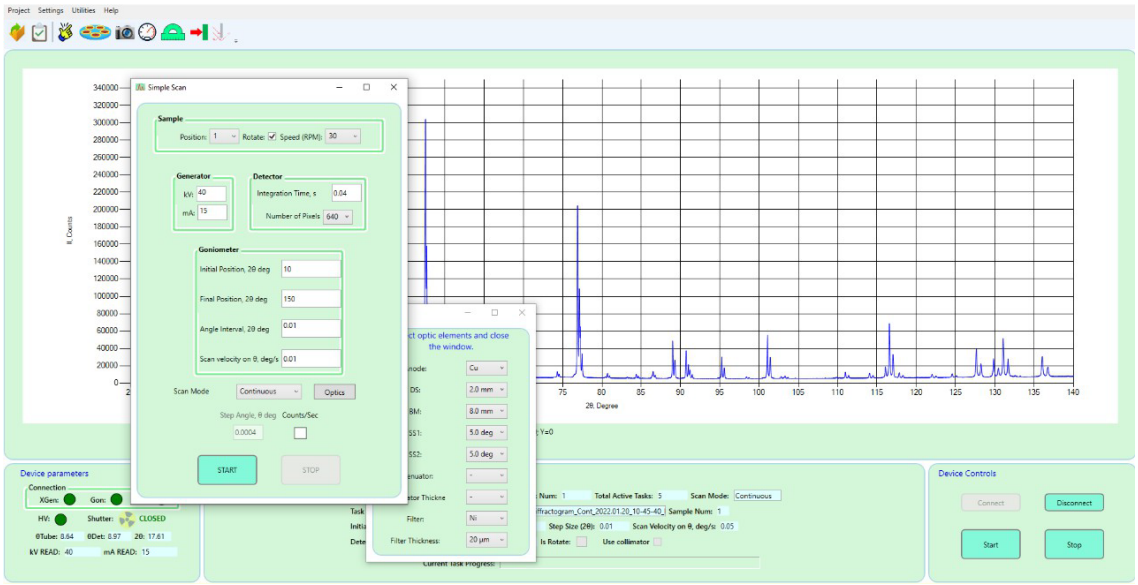
Automatic self-diagnostics of the diffractometer Automatic pre-heating of the x-ray tube Automatic calibration using the reference sample Automatic software update to the latest version
Logging

MANAGEMENT FUNCTIONS THE HARDWARE OF THE DIFFRACTOMETER:

Setting the parameters of the generator, detector and goniometer Selection of scanning parameters
(angular range, step size, integration time, measurement time)

CONTROL FUNCTIONS FOR SCANNING MODES AND PARAMETERS:

Continuous scanning mode Step-by-step scanning mode



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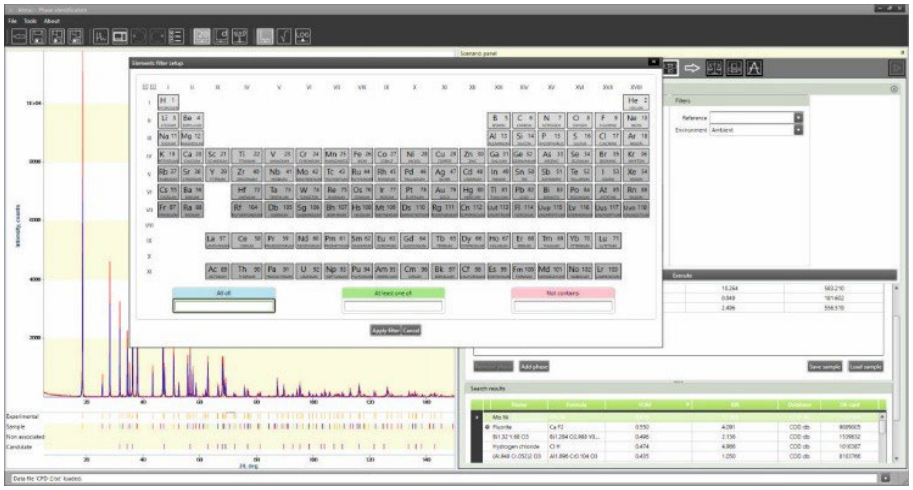
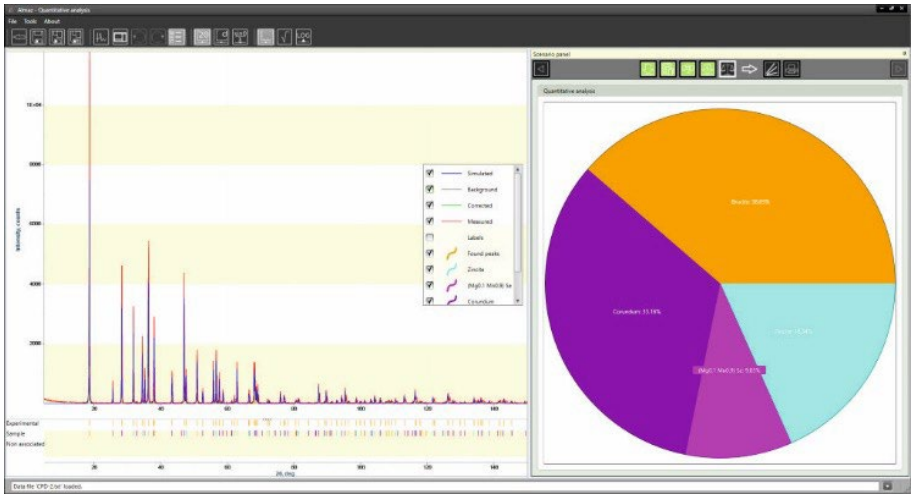
KEY FEATURES OF ALMAZ DATA ANALYSIS SOFTWARE

- Automatic search for diffraction peaks
- Data preprocessing: background subtraction, $K\alpha_2$ and K_β separation, Lorentz correction, correction for absorption and polarization, smoothing
- Crystallite size
- Indexing
- Qualitative analysis
- Quantitative analysis by RIR method
- Quantitative analysis using the internal standard method using calibration factors
- Profile analysis, refinement of lattice parameters by methods of the full profile refinement (Rietveld, Pawley, Le Bail)
- Access to crystallographic databases: COD and ICDD PDF-2





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10. DELIVERY SET

COMPONENTS	BASIC CONFIGURATION	OPTIONAL (ON REQUEST)
Generator	600 W (40 kV, 15 mA)	300 W (30 kV, 10 mA)
X-ray tube	1.5 kW, Cu, ceramic focus 0.4x8 mm	2.0 kW, Mo 1.2 kW, Co 1.3 kW, Cr 0.9 kW, Fe
Goniometer	Vertical θ-θ, Independent arms, R = 150 mm, -6° ÷ +154° (2θ), accuracy <0.01° (2θ), scanning speed: 0.01 – 600 o/min (2θ), minimal step: 0.0003° (2θ)	
Cooling	Internal water cooling (closed circuit) system	
Incident-beam mask	3, 5, 8 mm	Customized
Incident-beam Soller slit	5° Mo	1°, 2.5° Mo
Anti-scattering slit	0.03° (0.05 mm), 0.065° (0.1 mm)	Customized
Incident-beam Soller slit	5° Mo	1°, 2.5° Mo
Incident-beam divergence slit	0.655o (1 mm), 1.31° (2 mm), 1.965o (3 mm)	from 0.03° (0.05 mm) to 5.89° (9 mm)
Diffracted-beam filter	Ni 0.02 mm	Ni 0.015 mm, 0.03 mm V 0.015 mm, 0.025 mm Fe 0.015 mm, 0.025 mm Zr 0.05 mm, 0.075 mm, 0.1 mm
Diffracted-beam Soller slit	5° Mo	1°, 2.5° Mo
Direct beam absorber	+	-
Knife-edge collimator	-	Mechanical or automatic knife-edge collimator with tantalum blade
Variable divergence slit (VDS)	-	+
Slit for adjusting	0.03° (0.05 mm)	0.065° (0.1 mm)
Slits for zero line adjusting on the sample holder	0.05 x 20 mm, 1 pc 0.05 x 1 mm, 1 pc	-
Attenuator	Cu 0.2 mm – 1 pc Al 0.2 mm – 1 pc	Cu: 0.05 mm, 0.07 mm, 0.1 mm Al: 0.05 mm, 0.075 mm, 0.1 mm, 0.125 mm, 0.15 mm, 0.175 mm

COMPONENTS	BASIC CONFIGURATION	OPTIONAL (ON REQUEST)
Cuvettes for powder samples	duralumin 0.2 mm depth, 2 pcs 0.5 mm depth, 2 pcs 1.0 mm depth, 2 pcs	glass, duralumin and PMA 0.2 – 2.0 mm depth
Back loaded sample holder or cuvette	1 set	any quantity
Cuvette with adjustable bottom	1 pc	any quantity
Cuvette for reference sample SRM 1976c NIST	duralumin, 1 pc	glass, 1 pc
Glass plate for specimen surfaces alignment	1 pck	any quantity
Zero background holder	-	silicon monocrystalline plates with or without cavity
Standard sample	SRM 1976c NIST, 1 pc (corundum)	SRM 660c NIST (LaB6 powder) SRM 640e NIST (Si powder)
Holder for bulk samples	-	+
Rotating sample stage (incl. 10 cuvettes)	-	+
8-position automated sample changer with rotating (incl. 16 cuvettes)	-	+
Heating stage	-	+
Operator's software	TellusCon	+
Data analysis software	ALMAZ	+
Crystallography databases	COD	ICDD PDF-2
Computer	I5/16Gb/1Tb Windows 10.	

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11. TECHNICAL SPECIFICATIONS

OPERATOR WORKSTATION Minimal recommended configuration	
System unit	• IBM compatible • Central processing unit (CPU) – i5 or better • RAM - 16 GB • Hard disk (HDD) - at least 1 Tb • Operating System - MS Windows 10.0 (64 bit) or higher • Integrated video card (minimum 1 GB, hardware support DirectX11 and shader model 5.0) or similar discrete.
Monitor	LCD Monitor, 24” or better
Mouse and keyboard	USB 2.0 or wireless
Interfaces	Ethernet 2xRJ-45 (one connector if LAN access is not needed)

POWER REQUIREMENTS	
Voltage	110 - 264 VAC, single-phase (with a high-voltage generator 300 W) 180 - 264 VAC, single-phase (with a high-voltage generator 600 W)
Frequency	49 - 61 Hz
Maximum power consumption	700 W, 6A, (computer - 100 W) (with a high-voltage generator 300 W) 1000 W, 6A, (computer - 100 W) (with a high-voltage generator 600 W)
The standard delivery package includes a power cable 1.8 m long, equipped with a connecting plug of the hybrid type E / F CEE 7/7. Other cable length or type of plug on request.	

CLIMATE REQUIREMENTS	
Ambient temperature	from +10°C to +35°C

Optimal temperature	from +18°C to +28°C
Relative humidity of air at a temperature of +23°C	up to 75%, without condensation
Atmospheric pressure	84-106.7 kPa (630-800 mm Hg) (up to 1000 m above sea level)

EXTERNAL DIMENSIONS AND WEIGHT	
Weight, kg	120
Width, mm	700
Depth (with the door closed), mm	700
Depth (with open door), mm	700
Height (with the door closed), mm	860
Height (with open door), mm	1220
The protrusion of the door for the housing relative to the front panel (when opened), mm	170

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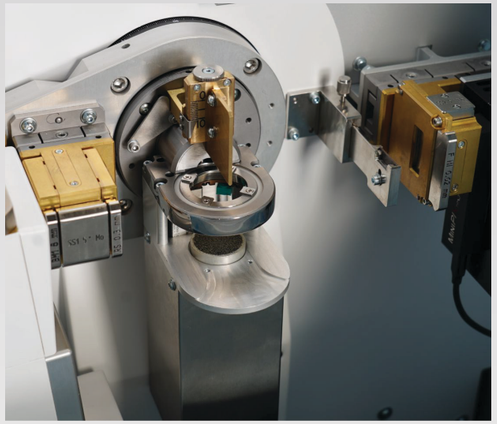
12. MAINTENANCE

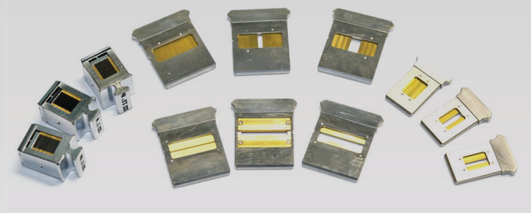
The inspection and maintenance procedures listed below (hereinafter referred to as the maintenance), as well as the proposed time intervals are mandatory and aimed at ensuring the Diffractometer operability and safety, as well as timely prevention of failure or deterioration in functioning in accordance with the declared technical specifications during the specified service life.

FREQUENCY	DIFFRACTOMETER OPERATOR	MANUFACTURER SERVICE TECHNICIAN
Daily	+	-
Monthly	+	-
Every six (6) months	-	+
Every twelve (12) months	-	+

APPLICATIONS

- Science and education
- Geology and mining
- Cement industry
- Chemical industry
- Oil-gas exploration
- Forensic expertise
- Automotive industry
- Pharmaceutical and cosmetics industries
- And others.... (archeology, gemology, food industry etc.)





TECHNICAL DATA SHEET

Generator power	600/300 W (on request)
Target	Cu (Cr, Fe, Co, Mo – optional)
Cooling system	Internal water cooling: closed-circuit
Goniometer	Θ-Θ vertical, radius 150 mm
Scanning range	-6° ÷ +154° (2Θ)
Minimal step	0.001° (2Θ)
Positioning accuracy	+/- 0.01° (2Θ)
Scanning speed	0.01-600°/min
Dimensions (W x D x H)/Weight	700x700x820 mm/115 kg
Personal computer	PC with OS Windows
Interface	USB/Ethernet

LINEV SYSTEMS®

info@linevsystems.com linevsystems.com

LL-C Certification 9001:2015

0908-SA06032026

LINEV SYSTEMS
United for Innovation

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TELLUS

X-RAY POWDER DIFFRACTOMETER

DESKTOP ANALYTICAL INSTRUMENTS

KEY FEATURES

- COMPACT DESIGN
- THETA/THETA GEOMETRY
- HIGH EFFECTIVE DETECTOR
- FAST MEASUREMENTS
- HIGH SIGNAL/NOISE RATIO
- LONG LIFETIME X-RAY TUBE AND DETECTOR
- NO EXTERNAL COOLING
- SAFETY GUARANTEED
- ANALYTICAL SOFTWARE

VERY USEFUL AND POWERFUL TECHNIQUE FOR

- RESEARCH AND EDUCATION
- ENVIRONMENTAL, GEOLOGY AND MINERALOGY
- CEMENT AND OIL INDUSTRY
- CHEMICAL PROCESS DEVELOPMENT, ANALYTICAL CHEMISTRY
- QUALITY CONTROL
- PHARMACEUTICALS, DRUG DISCOVERY
- FORENSIC SCIENCE

SOLUTION WITH OPPORTUNITIES OF ANALYTICAL TOOL AT A LOW COST

TELLUS is a compact and advanced tool designed for X-ray diffraction analysis. It is used for researching and identifying new compounds, as well as for quality control and determining the composition of different crystalline substances such as solid samples and powders.

TELLUS is a valuable asset in academic laboratories, enabling researchers to conduct precise studies on synthesized samples. It also aids students in quickly and effectively learning X-ray diffraction techniques.

The diffractometer can be equipped with either 1D or 2D photon counting Si detector with a pixel width of 50 µm providing fast and high-resolution measurements. Fast, robust and maintenance free detectors with 100% efficiency for X-ray radiation with minimum loss of intensity and maximum linear range. The high precision class gonniometer together with small pixel width of detector ensure the angle accuracy of better than ±0.01˚ (2). The instrument with proper optic components provides the peak width at least 0.05° 2θ over the full angular range.

The software interface with predefined experimental scenarios makes the measurement process clear even for new users, though the experts in XRD can create their own protocol. The software for analysis is based on the advanced analytical methods to make the quantitative and qualitative analysis of samples more precise.

Both the detector and the X-ray source have a long lifetime, what significantly reduces the maintenance costs and saves the budget.

	Mythen2 R 1D	MiniPIX TPX 3
Pixel size	50 µm by 8 mm	55 x 55 µm
Type / number of pixel	Linear 1D / 640	Matrix 2D / 250x250
Energy range (keV)	4 - 40	2 - 60
Detection mode	Single threshold	Two-threshold
Frame rate (Hz)	100	16
Cooling	Air	Air
Module weight (g)	100	41

ACCESSORIES

Optics

Incident beam mask, Soller slits, divergence slit, direct beam absorber, set of alignment slits

Sample holders

Standard holders (deep and shallow cavities, perforated), Standard Reference material holder, glass holders

K-beta filter

Ni 0.02 mm filter for diffracted beam

Standard Reference material

NIST 1976c

Optional Accessories

- Anti-scattering slit
- Zero diffraction plate
- Rotating sample holder
- Sample changer on 8 pcs
- Knife edge - collimator
- Heating chamber
- Variable divergence slit (VDS)
- Holder for the bulk samples

SOFTWARE PACKAGE

TELLUS XRD series

TELLUSCon

for system control and data acquisition

- Interface optimized for advanced and non-experienced users
- Measurement by steps or continuous scan
- Predefined measurement scenarios
- Data preprocessing
- Measurement report

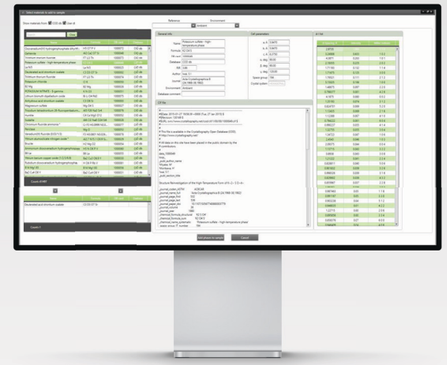
SPECIALISED SOFTWARE

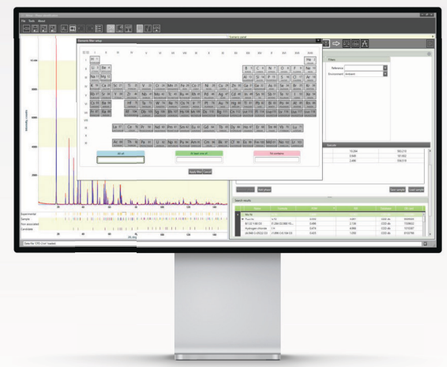
for advanced data analysis

- Data preprocessing (virtual monochromator, Lorentz-polarization factors correction, absorption correction, smoothing, background definition)
- Peak search and its identification
- Qualitative phase analysis
- Quantitative analysis with RIR and internal standard calibration methods
- Refinement of lattice parameters by whole pattern-fitting method (Rietveld, Pawley, Le Bail)
- Analysis report

Databases

- COD (open-access collection)
- ICDD PDF-2 (optional)





SERVICE AND SUPPORT

The equipment and services we provide our corrections partners are mission critical to their day-to-day operations. We have established an industry-leading service level agreement that defines, categorizes, and prioritizes service support incidences based upon the overall impact to the customer's organization - the higher the impact, the higher the priority, the quicker the response time. The charts below represent the mechanics of the agreement:

Priority Levels:

Level	Name	Description	Type	Operating hours
P1	Scheduled Task	Scheduled maintenance or mutually agreed upon date/time for work to occur. (example: Preventative Maintenance, Installation, Training)	Task	8 am to 6 pm
P2	Low	Low priority where productivity and overall impact to the organization is not affected (example: Light Bulb, Configuration, Software Update)	Problem	8 am to 6 pm
P3	Normal	Medium priority where productivity is impacted for a single user and considered a nuisance (example: Log On, Reporting, Printing, Image Storage/Export)	Problem	8 am to 6 pm
P4	High	High priority where productivity is impacted for multiple/many users and is considered detrimental to the operations of the customer (example: Full features not functioning, intermittent errors, need to reboot the system)	Problem	24x7
P5	**URGENT**	**CRITICAL / OUTAGE** where all systems/services are unavailable for all users/offices. No workaround available. (example: Hard error message and the unit will not function/scan, Unit does not power on)	**Incident**	**24x7**

Escalation Matrix:

Level	2 Hours	4 Hours	8 Hours	24 Hours	48 Hours	72 Hours
P1	Email Support at support@linevsystems.com or LINEV Systems Service Line 844-989-6789					Service Supervisor
P2	Email Support at support@linevsystems.com or LINEV Systems Service Line 844-989-6789			Service Supervisor	Service Manager	RSM
P3	Email Support at support@linevsystems.com or LINEV Systems Service Line 844-989-6789		Service Supervisor	Service Manager	RSM	Director
P4	LINEV 844-989-6789	Service Supervisor	Service Manager	RSM	Director	Vice President
P5	LINEV 844-989-6789	Service Supervisor	Service Manager	RSM	Director	Vice President

There are two ways to open a Service Ticket in our system, by calling 844-989-6789 OR by emailing support@linevsystems.com. Reporting a Service Ticket both ways will slow the response times.

When emailing or calling in a Service Ticket we ask that you have the following information ready:

- Agency Name:
- System Type:
- System Serial Number
- Symptom(s) or Problem(s)
- Primary POC telephone number and email address
- Secondary POC telephone number and email address

LINEV SYSTEMS
United for Innovation

WARRANTY BENEFITS

Technical Support
Annual Preventive Maintenance
No Labor Costs
No Parts Costs
No Travel Costs
Software upgrades

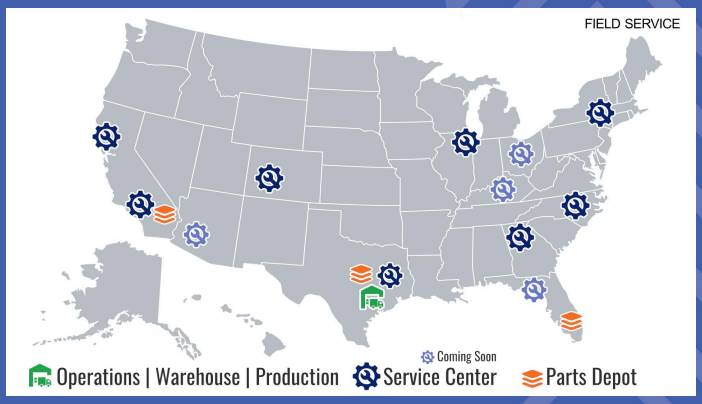
ANNUAL RADIATION REPORT

Unit Inspection
Operation Area Inspection
Furnished Report for Auditing

EXTENDED WARRANTY AVAILABLE

FIELD SERVICE

24/7 support line ✆ 844.989.6789
✉ support@linevsystems.com



LINEV SYSTEMS
United for Innovation

13631 Poplar Circle,
Conroe, TX 77304, USA
Sales Inquiries 936.588.2064
Sales@linevsystems.com

STANDARD WARRANTY TERMS AND CONDITIONS

GENERAL TERMS AND CONDITIONS

1.1. LINEV Systems US Inc. (hereinafter referred to as "LINEV) shall handle warranty related claims regarding equipment manufactured by LINEV
1.2. The products have been manufactured to the highest quality standards and are warranted to the original purchaser only. This warranty is not transferable.
1.3 The products are covered by the warranty for a duration of 12 (twelve) months from the date of acceptance by the Customer. The products are guaranteed to be free from defects in workmanship and parts during the warranty period. The defects that occur within the warranty period under normal use and care will be repaired or the defective parts or products will be replaced at LINEV's sole discretion
1.4. LINEV reserves the right to replace the product or relevant part with the same or equivalent product or part rather than repair it. Where a replacement is provided the product or part replaced becomes the property of LINEV. LINEV may replace parts with refurbished parts. Replacement of a product or a part does not extend or restart the warranty period.

2. SERVICE OR REPLACEMENT PROCEDURE AND COST SHARING

2.1. The defective product or part shall be sent back to LINEV or a third party indicated by LINEV at LINEV's sole choice and instruction.
2.2. The sender shall ensure that the product is properly packaged to ensure that no damage occurs to the product during transit. An explanation of the problem shall be included. The contract number and the product's serial number shall be expressly stated when making a claim under this warranty.
2.3. LINEV shall provide the replacement parts or products or repair the defective parts or products free of charge.
2.4. LINEV will provide standard shipping and insurance of the replacement and defective parts or products to and from LINEV or a third party as indicated by LINEV. Express shipping may be provided at extra cost.
2.5. LINEV will provide warranty-related labor costs as well as the travel-related costs if repairs are deemed the result of equipment failure or defects in workmanship. All other repairs will be billable. Cost estimates for non-warranty repairs will be provided in advance.

3. EXCLUSIONS AND EXCEPTIONS

3.1. If no identical product is available for replacement, LINEV reserves the right to replace the product with a device of equal capacity or offer the customer the choice of a product upgrade which may incur an extra cost.
3.2. This warranty is limited to defects in workmanship or parts. All defective products or parts will be repaired or replaced. This warranty does not extend to accessories, manuals, packaging, batteries or any other consumable item.
3.3. The warranty will not apply if the factory-applied serial number has been altered or removed from the product.
3.4. This warranty does not cover damage, malfunction or failure which resulted from alterations, accident, misuse, abuse, fire, liquid spillage, maladjustment of customer controls, use of an incorrect voltage, power surges and dips, thunderstorm activity, acts of God, voltage supply problems, tampering or unauthorized repairs by any person, use of defective or incompatible accessories, exposure to abnormally corrosive conditions or entry by any insect, vermin or foreign object in the Product.
3.5. This warranty does not cover damage arising during relocation. Relocation costs are not included in standard warranty.
3.6. LINEV will not be liable for any loss, damage or alterations to (1) third party equipment, furniture, hardware or software; or (2) programs, data or information stored on any media or any part of the product, no matter how occurring; or for any loss or damage arising from loss of use, loss of profits or revenue, or for any resulting indirect or consequential loss or damage.
3.7. This warranty does not cover normal wear and tear of the product or parts.
3.8. LINEVexcludes all other warranties, conditions, terms, representations and undertakings whether express or implied.
3.9. The terms and conditions related to the validity period and cost sharing arrangements set forward in part. 1.3., 2.4., and 2.5. of this document, can be superseded by related terms and conditions of sales contracts.

PRICING

ITEMS	QTY	UNIT PRICE	AMOUNT
TELLUS - BENCHTOP (XRD) DIFFRACTOMETER	1	$ 87,970.00	$ 87,970.00
BASIC PACKAGE:			
Copper X-Ray tube 1.5 kW			
Detector;			
Goniometer (150mm)			
High voltage generator 600W (40 kV,15 mA)			
Set of optical slits			
Divergence slit;			
Scattering slit;			
Soller slit;			
Incident-beam mask 3, 5, 8 mm;			
Diffracted-beam filter: Ni 0.02 mm;			
Direct beam absorber;			
Slit for adjusting;			
Slits for zero line adjusting on the sample holder;			
Attenuators for adjusting			
Mechanical knife-edge collimator			
Set of sample holders			
Cuvettes for powder samples			
(0.2 mm depth, 2 pcs; 0.5 mm depth, 2 pcs; 1.0 mm depth, 2 pcs);			
Cuvette for the sample preparation by the reverse loading method (1 pc.);			
Cuvette with adjustable bottom (1 pc.);			
Glass plate for specimen surfaces alignment (1 set);			
Set of cuvettes for reference samples			
Reference Sample SRM 1976c NIST;			
User manual			
Service kit			
Operator Workstation			
min. configuration: CPU Core i3/i5, DDR 4Gb, 500Gb HDD,			
24" Windows 11, Ethernet, Wi-Fi			
Automated sample changer with rotating on 8 pos. (with 16 cuvettes)			
Variable divergence slit (VDS)			
TELLUSCon Package for system control and data acquisition	1		Included
ICDD PDF-2 database (1 license, 5 years)	1	$ 9,400.00	$ 9,400.00
Software package for data analysis with integrated COD data base	1		Included
INSTALLATION & TRAINING	1	$ 6,500.00	$ 6,500.00
1 YEAR EXTENDED WARRANTY (Time of Sale)		$ 7,500.00	Optional
Trade Compliance Fee	1	$ 8,797.00	$ 8,797.00
		Subtotal	$ 112,667.00
		Shipping	$ 1,500.00
		Tax rate	0%
		Tax due	$ -
		TOTAL	**$ 114,167.00**

LINEV Systems US, Inc.
✆ 936-588-2064
13631 Poplar Circle, Conroe, Texas 77304

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

State of West Virginia
Centralized Request for Quote
Laboratory

Proc Folder: 1985423
Doc Description: Benchtop Powder X-Ray Diffraction Instrument
Proc Type: Central Purchase Order

Reason for Modification:

Date Issued	Solicitation Closes	Solicitation No	Version
2026-06-05	2026-06-23 13:30	CRFQ 0306 GEO2600000002	1

BID RECEIVING LOCATION

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

VENDOR

Vendor Customer Code:

Vendor Name : LINEV Systems US, Inc.

Address : 13631

Street : Poplar Circle

City : Conroe

State : Texas **Country :** USA **Zip :** 77304

Principal Contact : Lukas Richter

Vendor Contact Phone: 854.205.7570 **Extension:**

FOR INFORMATION CONTACT THE BUYER

Larry D McDonnell
304-558-2063
larry.d.mcdonnell@wv.gov

Vendor Signature X  **FEIN#** 20-5504368 **DATE** 6/22/2026

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

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

(Printed Name and Title) Lukas Richter

(Address) 13631 Poplar Cir, Conroe, TX 77304

(Phone Number) / (Fax Number) 854.205.7570

(email address) lrichter@linevsystems.com

CERTIFICATION AND SIGNATURE: By signing below, or submitting documentation through *wv*OASIS, I certify that: I have reviewed this Solicitation/Contract 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/Contract 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 this bid or offer was made without prior understanding, agreement, or connection with any entity submitting a bid or offer for the same material, supplies, equipment or services; that this bid or offer is in all respects fair and without collusion or fraud; 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; 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.

By signing below, I further certify that I understand this Contract is subject to the provisions of West Virginia Code § 5A-3-62, which automatically voids certain contract clauses that violate State law; and that pursuant to W. Va. Code 5A-3-63, the entity entering into this contract is prohibited from engaging in a boycott against Israel.

LINEV Systems US, Inc.
(Company)

(Signature of Authorized Representative)

Elena Lineva, Chief Operating Officer 6/22/2026
(Printed Name and Title of Authorized Representative) (Date)

936.588.2064
(Phone Number) (Fax Number)

sales@linevsystems.com
(Email Address)