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առաջարկվող ապրանքի ամբողջական

Shanxi laboratory Equipment CO LTD-ն ԲԿԳԿ-ԷԱՃԱՊՁԲ-26/10 ծածկագրով կազմակերպված Էլեկտրոնային աճուրդին մասնակցելու շրջանակում ներկայացնում է իր կողմից առաջարկվող ապրանքի ամբողջական նկարագիրը

Չափաբաժնի համար	Առաջարկվող ապրանքի				
	Ֆիրմային անվանումը	ապրանքային նշանը	մակնիշը	արտադրողի անվանումը	տեխնիկական բնութագիրը
1	Shijiazhuang Suin Instruments	Suin	Suin	Shijiazhuang Suin Instruments	Purpose The equipment is intended for modernization of an existing scientific and educational laboratory. All equipment must be new and manufactured in 2025-2026. Main directions of modernization: A Vector Network Analyzer (VNA) with support up to 110 GHz, intended for scientific and educational research in: characterization of various materials development of microwave devices Functional radio testers with a vector signal generator, for creating an independent communication network supporting standards: GSM900 /

						GSM1800 / EGPRS, HSPA+, LTE, NB-IoT, eMTC, WLAN, for studying security issues during data transmission between communication devices (mobile phones, NB-IoT sensors, Wi-Fi devices). 1. Vector Network Analyzer (VNA) – 1 unit Included components: Direct IF input Direct source and receiver access Mechanical step attenuator for Port 1 (up to 35 dB, 5 dB steps) Mechanical step attenuator for Port 2 (up to 35 dB, 5 dB steps) Spectrum analyzer mode Time Domain Analysis (TDA) mmWave converter capability Frequency extension up to 110 GHz Cable set for mmWave converter system Technical specifications: Frequency range: 10 MHz to 110 GHz Ports: 2-port Aging rate: $\pm 1 \times 10^{-6}$ per year Initial accuracy: $\pm 5 \times 10^{-7}$ Frequency resolution: ≤ 1 Hz Measurement points: up to 100,001 points IF bandwidth: 1 Hz to 1.5 MHz Switching time between channels: ≤ 2 ms Dynamic range (without mmWave converters, up to 67 GHz): 10–30 MHz: ≥ 85 dB 30–100 MHz: ≥ 102 dB 100–500 MHz: ≥ 116 dB 500
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MHz-1 GHz: ≥ 130 dB 1-16 GHz: ≥ 134 dB 16-20 GHz: ≥ 131 dB 20-30 GHz: ≥ 127 dB 30-40 GHz: ≥ 119 dB 40-50 GHz: ≥ 105 dB 50-67 GHz: ≥ 98 dB Dynamic range (with mmWave converters, up to 110 GHz): 10-30 MHz: ≥ 54 dB 30-100 MHz: ≥ 94 dB 100-500 MHz: ≥ 94 dB 500 MHz-1 GHz: ≥ 120 dB 1-20 GHz: ≥ 120 dB 20-30 GHz: ≥ 105 dB 30-40 GHz: ≥ 85 dB 40-60 GHz: ≥ 80 dB 60-80 GHz: ≥ 75 dB 80-90 GHz: ≥ 90 dB 90-110 GHz: ≥ 80 dB Output power (without mmWave converters): Up to +16 dBm (low frequencies) Decreasing to +5 dBm (67 GHz) Output power (with mmWave converters): From +10 dBm down to -17 dBm depending on frequency Other parameters: Phase noise (10 kHz offset, 26.5-40 GHz): ≤ -95 dBc/Hz Connectors: 1.85 mm (up to 67 GHz) 1.00 mm (up to 110 GHz) Touchscreen: ≥ 12.1 ", 1280×800 Interfaces: GPIB, LAN, USB, DVI Included accessories: 2 × mmWave converters (same manufacturer as VNA) RF cables (1.85 mm and 1.00 mm) Calibration kits: 1.85 mm (0-67

GHz) 1.00 mm (0-110 GHz) Power sensor up to 110 GHz Torque wrench (8 mm) 2. Vector Signal Generator – 1 unit Capabilities: AM / FM / PM modulation Pulse modulation Digital modulation OFDM signal generation GPS and GLONASS support Frequency range: 4 kHz to 7.125 GHz Resolution: ≤ 0.001 Hz Output level: Up to +16 dBm Down to -145 dBm Phase noise (20 kHz offset): -110 dBc (100 MHz) -95 dBc (up to 7.125 GHz) Digital modulation support: ASK, FSK, PSK, QAM (up to 2048QAM) Interfaces: LAN, USB SCPI remote control RF output: N-type Display: $\geq 5"$, color touchscreen 3. Functional Radio Tester – 1 unit Supported standards: GSM / EGPRS WCDMA / HSPA+ LTE / LTE-A NB-IoT eMTC WLAN (802.11 a/b/g/n/ac) Frequency range: 300 MHz to 6 GHz Key features: Built-in spectrum analyzer TX measurements Network emulation IP traffic and security analysis Interfaces: USB, LAN (1 Gbit) Remote control support Display: 8.4" front panel External touchscreen (15", 1280x800) Includes: 5 x 5G test SIM cards (UICC,

					3GPP compliant) Software for: automation reporting 4. RF Shielded Enclosure - 1 unit Frequency range: Up to 6 GHz Shielding effectiveness: ≥ 80 dB (0.4-4 GHz) $\geq 60-80$ dB (up to 6 GHz) Includes: Antenna coupler RF connectors (N-type) USB and LAN feedthroughs RF cables 5. Microwave Amplifier - 1 unit Frequency range: 2 GHz to 20 GHz Output power: 17-26 W (depending on frequency) Gain: ≥ 47 dB Noise figure: ≤ 8 dB
ПОЛНОЕ ОПИСАНИЕ предлагаемого товара					
Shanxi laboratory Equipment CO LTD в качестве участника в рамках участия в электронном аукционе под кодом ЕЧДЧ-ЕЧДЧ72Р-26/10 ниже представляет полное описание предлагаемого товара.					
Номер лота			Предлагаемый товар		
	фирменное наименование	товарный знак	марка	наименование производителя	технические характеристики
1					Authorization Requirement Each bidder must provide an official manufacturer authorization letter confirming: Status as authorized scientific and educational laboratory. partner/distributor Right to participate in the tender. All equipment must be new and manufactured in 2025-2026. Main directions of modernization: A Vector Network Analyzer (VNA) with support up to 110 GHz, intended for scientific and educational research in: obligatory to: install equipment and configure, integrate, provide software characterization of various materials updates Installation and demonstration. The supplier must perform at their own expense: VNA: signal generator, for creating an independent communication network Installation and calibration Demonstration (S-parameters, supporting standards: GSM900 / impedance, return loss) Signal

MHz-1 GHz: ≥ 130 dB 1-16 GHz: ≥ 134 dB 16-20 GHz: ≥ 131 dB 20-30 GHz: ≥ 127 dB 30-40 GHz: ≥ 119 dB 40-50 GHz: ≥ 105 dB 50-67 GHz: ≥ 98 dB Dynamic range (with mmWave converters, up to 110 GHz): 10-30 MHz: ≥ 54 dB 30-100 MHz: ≥ 94 dB 100-500 MHz: ≥ 94 dB 500 MHz-1 GHz: ≥ 120 dB 1-20 GHz: ≥ 120 dB 20-30 GHz: ≥ 105 dB 30-40 GHz: ≥ 85 dB 40-60 GHz: ≥ 80 dB 60-80 GHz: ≥ 75 dB 80-90 GHz: ≥ 90 dB 90-110 GHz: ≥ 80 dB Output power (without mmWave converters): Up to +16 dBm (low frequencies) Decreasing to +5 dBm (67 GHz) Output power (with mmWave converters): From +10 dBm down to -17 dBm depending on frequency Other parameters: Phase noise (10 kHz offset, 26.5-40 GHz): ≤ -95 dBc/Hz Connectors: 1.85 mm (up to 67 GHz) 1.00 mm (up to 110 GHz) Touchscreen: ≥ 12.1 ", 1280×800 Interfaces: GPIB, LAN, USB, DVI Included accessories: 2 × mmWave converters (same manufacturer as VNA) RF cables (1.85 mm and 1.00 mm) Calibration kits: 1.85 mm (0-67

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					Generator: Setup and operation Signal generation demo Radio Tester: Setup and integration with existing systems Demonstration of wireless standards testing Amplifier: Installation and operation Functional demonstration Warranty Minimum: 1 year
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