

Statement of Work

ANALYZERS TEST EQUIPMENT

Southeast Louisiana Veterans Health Care System
New Orleans, LA

10/14/17

1. PURPOSE

1.1. The purpose is to provide BIOMEDICAL/FACILITIES Analyzers and Test Equipment at Southeast Louisiana Veterans Health Care System (SLVHCS), Central Energy Plant building, 2400 Canal St, New Orleans, LA 70119.

2. SCOPE

2.1. The Contractor shall transport and install all listed equipment. All products must meet all salient characteristics defined in this section.

2.2. All equipment and installation must meet manufacturers and VA specifications.

2.3. The Contractor shall furnish all supplies, equipment, facilities and services required for delivery and installation of the supplies and equipment.

2.4. The Contractor is responsible for any missing parts and components not included in order to carry out the installation.

3. SALIENT CHARACTERISTICS

3.1.1. .. ANALYZER, ESU

3.1.1.1. Suggested Manufacturer Brand Name: Fluke Biomedical, Model QA-ES, OR EQUIVALENT as follows:

3.1.1.2. Specifications/Salient Characteristics:

3.1.1.2.1. Modes of operation: continuous operation, single operation, power distribution, RF Leakage current, RECCM, manual remote

3.1.1.2.2. Measures true RMS value of applied waveform with RMS bandwidth of 10 Hz to 10 MHz (instrumentation only) and 10 Hz to 2.5 MHz (with loads)

3.1.1.2.3. Load resistance from 10 Ohms to 2500 Ohms in step of 25 Ohms and 2500 Ohms to 5200 Ohms in step of 100 Ohms

3.1.1.2.4. Oscilloscope output of 5 V/A uncalibrated, 100 mA RF current minimum input

3.1.1.2.5. Protocol formats and data may be stored, recalled, printed out, or transferred.

3.1.2. .. INFUSION DEVICE ANALYZER

3.1.2.1. Suggested Manufacturer Brand Name: Fluke Biomedical, Model IDA-1S, OR EQUIVALENT as follows:

3.1.2.2. Specifications/Salient Characteristics:

3.1.2.2.1. Capable of flow rate, volume, and pressure measurement

3.1.2.2.2. Capable of storing test results for later viewing (up to 100 results)

3.1.2.2.3. Occlusion pressure measurements to 45psi

3.1.2.2.4. Can be used to test a variety of infusion pumps

3.1.2.2.5. Has an auto-start feature

3.1.2.2.6. Results of test in progress save in case of accidental power down

3.1.2.2.7. LCD touch screen; battery powered with up to 10 hours continuous operation

3.1.3. .. CALIBRATOR, AUDIOMETER

3.1.3.1. Suggested Manufacturer Brand Name: Monitor Instruments, Inc, Model MI-300, OR EQUIVALENT as follows:

3.1.3.2. Specifications/Salient Characteristics:

- 3.1.3.2.1.** Calibration at 70dB and hearing level at 1kHz
- 3.1.3.2.2.** Configurations of normally open and normally closed response
- 3.1.3.2.3.** Able to work with manual or automatic microprocessor audiometers
- 3.1.3.2.4.** Indicators for right response, left response, and power on

3.1.4. .. EEG SIMULATOR

3.1.4.1. Suggested Manufacturer Brand Name: NETECH, Model 330, OR EQUIVALENT as follows:

3.1.4.2. Specifications/Salient Characteristics:

- 3.1.4.2.1.** EEG simulator
- 3.1.4.2.2.** Has 5 channel output of ABR, sine, square, and triangle waveforms
- 3.1.4.2.3.** Ability to select amplitudes and frequencies

3.1.5. .. ELECTRICAL SAFETY ANALYZER

3.1.5.1. Suggested Manufacturer Brand Name: Fluke Biomedical, Model ESA-612, OR EQUIVALENT as follows:

3.1.5.2. Specifications/Salient Characteristics:

- 3.1.5.2.1.** Electrical safety analyzer with functionality of a simulator, multimeter, and electrical safety tester
- 3.1.5.2.2.** Selection of two test loads
- 3.1.5.2.3.** 20 A at 120 V current capability
- 3.1.5.2.4.** Internal memory for at least 100 test records
- 3.1.5.2.5.** USB connection for use with data viewer software (included)

3.1.6. .. GAS FLOW ANALYZER:

3.1.6.1. Suggested Manufacturer Brand Name: Fluke Biomedical, Model VT PLUS HF, OR EQUIVALENT as follows:

3.1.6.2. Specifications/Salient Characteristics:

- 3.1.6.2.1.** Bi-directional flow, pressure, volume, and oxygen concentration, and pressure measurements
- 3.1.6.2.2.** Capable of special HF mode of up to 900 BPM
- 3.1.6.2.3.** Capable of displaying 21 ventilator parameters displayed at once on one screen
- 3.1.6.2.4.** Capable of graphing minimum, maximum, average, absolute for all parameters
- 3.1.6.2.5.** RS-232 and printer ports
- 3.1.6.2.6.** Includes Windows-compatible graphics software

3.1.7. .. GAS FLOW ANALYZER, MOBILE:

3.1.7.1. Suggested Manufacturer Brand Name: Fluke Biomedical, Model VT MOBILE ENG, OR EQUIVALENT as follows:

3.1.7.2. Specifications/Salient Characteristics:

- 3.1.7.2.1.** Bidirectional flow, volume, vacuum, pressure, and oxygen-concentration measurements
- 3.1.7.2.2.** Onboard graphical display
- 3.1.7.2.3.** Capable of storing results
- 3.1.7.2.4.** Capable of trending and showing statistical analysis of all measured values
- 3.1.7.2.5.** At least 16 ventilator parameter measurements
- 3.1.7.2.6.** Portable capabilities

3.1.8. .. HANDHELD HDTV PATTERN GENERATOR

3.1.8.1. Suggested Manufacturer Brand Name: BK PRECISION, Model BK 1253, OR EQUIVALENT as follows:

3.1.8.2. Specifications/Salient Characteristics:

- 3.1.8.2.1.** Delivers test patterns for the testing of the most common HDTV displays to include at least Plasma, LCD, TFT, CRT, DLP, GLV, and OLED digital displays
- 3.1.8.2.2.** Displays the following formats: 1920 x 1080 30i, 1280 x 720 60p, 704 x 480 60p, NTSC, PAL & SECAM

3.1.9. .. TRACKER

3.1.9.1. Suggested Manufacturer Brand Name: HUNTRON, Model TRACKER 3200S, OR EQUIVALENT as follows:

3.1.9.2. Specifications/Salient Characteristics:

3.1.9.2.1. Variable range parameters

3.1.9.2.2. Capable of matching circuit impedance by setting the applied voltage, frequency and source resistance

3.1.9.2.3. Capable of displaying channels individually

3.1.9.2.4. Capable of use as a stand-alone unit

3.1.10. KEYSpan HIGH SPEED USB TO SERIAL ADAPTER CISCO BREAK SEQUENCE

3.1.10.1. Suggested Manufacturer Brand Name: TRIPP LITE, Model USA-19HS, OR EQUIVALENT as follows:

3.1.10.2. Specifications/Salient Characteristics:

3.1.10.2.1. USB to serial adapter

3.1.10.2.2. USB Type-A cable (3 ft)

3.1.10.2.3. TAA-compliant

3.1.10.2.4. Supports transfer speeds up to 230 kbps

3.1.10.2.5. Connects 9-pin serial device to computer or laptop USB-A port

3.1.11. INCUBATOR ANALYZER

3.1.11.1. Suggested Manufacturer Brand Name: Fluke Biomedical, Model INCU INCUBATOR ANALYZER, OR EQUIVALENT as follows:

3.1.11.2. Specifications/Salient Characteristics:

3.1.11.2.1. Capable of measuring humidity, airflow, sound, and four independent temperatures simultaneously

3.1.11.2.2. Compatible with closed, forced convection incubators and open infant warmers

3.1.11.2.3. Windows-compatible software for data collection, analysis, and documentation

3.1.12. NETWORK AUTO-TESTER

3.1.12.1. Suggested Manufacturer Brand Name: Fluke, Model LRAT-2000-KIT, OR EQUIVALENT as follows:

3.1.12.2. Specifications/Salient Characteristics:

3.1.12.2.1. 100/1000 fiber SFP interface and IPv6 support

3.1.12.2.2. Capable of saving results locally on the tester

3.1.12.2.3. Capable of accurately testing and identifying network connectivity problems for twisted pair and fiber optic Ethernet links at 10, 100, and Gigabit rates

3.1.12.2.4. Capable of verifying twisted pair Ethernet cable length and wiremap

3.1.12.2.5. Capable of measuring power over Ethernet under load

3.1.12.2.6. Capable of discovering the nearest switch and VLAN

3.1.13. FIELD SERVICE ENGINEER TOOL KIT

3.1.13.1. Suggested Manufacturer Brand Name: C2G, Model 27370, OR EQUIVALENT as follows:

3.1.13.2. Specifications/Salient Characteristics:

3.1.13.2.1. Tool kit to include at least the following: Soldering iron, Phillips screwdrivers (5.0 x 75 mm, 3.2 x 75 mm, 6.0 x 100mm), Slotted Screwdrivers (5.0 x 75 mm, 3.2 x 75 mm), electrical test screwdriver, utility knife, 2-pc alignment tool set (2-in-1), solder core, desoldering pump, anti-static wrist strap, 8-pc mini electronic combination wrench set (5, 5.5, 6, 7, 8, 9, 10, 11 mm), 6-pc precision screwdriver set, PU carrying case (256 x 295 x 103 mm), 8in wire stripper pliers, 5in side cutter pliers, 6in long nose pliers, 6in Line's man pliers, 9in Coaxial crimping tool, IC Extractor, soldering stand, part box, digital multi-meter

3.1.14. NETWORK SERVICE KIT

3.1.14.1. Suggested Manufacturer Brand Name: Fluke, Model MS2-KIT, OR EQUIVALENT as follows:

3.1.14.2. Specifications/Salient Characteristics:

3.1.14.2.1. Network service tool kit to include at least the following: microscanner cable verifier with main wiremap adapter, Intellitone Pro 200 probe, set of remote identifiers, shielded twisted-pair RJ45 patch cord, RJ11 patch cord, clip-set RJ45 to 8 alligator clip bare wire adapter, F coax push on patch cord, pouch, batteries, carrying case

3.1.15. VITAL SIGNS SIMULATOR 2

3.1.15.1. Suggested Manufacturer Brand Name: FLUKE BIOMEDICAL, Model PROSIM 8, OR EQUIVALENT as follows:

3.1.15.2. Specifications/Salient Characteristics:

3.1.15.2.1. 8-in-1 multifunction simulator tests ECT, respiration, temperature, IBP, cardiac output, NIBP, SpO2, and Rainbow multi-wavelength waveforms

3.1.15.2.2. SpO2 r-curve to test oximetry

3.1.15.2.3. Repeatable NIBP simulation (+/- 2mmHg) for dynamic pressure repeatability testing

3.1.15.2.4. Physiologically synchronized pulses over all parameters

3.1.15.2.5. Onboard and customizable patient pre-sets and autosequences

3.1.16. SpO2 FUNCTIONAL TESTER

3.1.16.1. Suggested Manufacturer Brand Name: FLUKE BIOMEDICAL, Model 4111101, OR EQUIVALENT as follows:

3.1.16.2. Specifications/Salient Characteristics:

3.1.16.2.1. Rechargeable battery lasts 10 hours minimum

3.1.16.2.2. signal strength indicator

3.1.16.2.3. SpO2 saturation (80%, 85%, 90%, 95%, 97%, 98%, 99% and 100%)

3.1.16.2.4. heart rate (30, 60, 80, 100, 120, 150, 245 Beats per minute)

3.1.16.2.5. perfusion (0.2%, 2%, and 10%)

3.1.16.2.6. R-Curves (Nonin, Masimo, Nellcor, Nihon Kohden, Mindray, GE, Philips, BCI)

3.1.17. ULTRASOUND WATTMETER

3.1.17.1. Suggested Manufacturer Brand Name: NETECH, Model UPM 2000, OR EQUIVALENT as follows:

3.1.17.2. Specifications/Salient Characteristics:

3.1.17.2.1. RS-232 port

3.1.17.2.2. accommodates a variety of transducer shapes (2.65in diameter maximum)

3.1.17.2.3. auto zero function

3.1.17.2.4. compact, lightweight, portable

3.1.18. WI-FI TESTER

3.1.18.1. Suggested Manufacturer Brand Name: NETSCOUT, Model 1TG2-3000, OR EQUIVALENT as follows:

3.1.18.2. Specifications/Salient Characteristics:

3.1.18.2.1. Troubleshooting capabilities (copper, fiber, and wifi)

3.1.18.2.2. Dual 10/100/1G copper/fiber Ethernet test ports

3.1.18.2.3. 802.11 a/b/g/b/ac Wi-fi radio

3.1.18.2.4. one-button automated testing

3.1.18.2.5. VoIP call monitoring and comprehensive logging

3.1.18.2.6. automated Wi-fi discovery

3.1.19. 3-YEAR GOLD TOOLS SUPPORT FOR 1TG2-3000

3.1.19.1. Suggested Manufacturer Brand Name: NETSCOUT, Model 1TG2-3000, OR EQUIVALENT as follows:

3.1.19.2. Specifications/Salient Characteristics:

3.1.19.2.1. Software and firmware upgrades; live technical support and exclusive dial-in phone number; loaner equipment service; free accessory replacements; knowledge base access; online training videos; <2 hours response from technical support; 24x7x365 phone and email customer support

3.1.20. Digital Pressure Meter

3.1.20.1. Suggested Manufacturer Brand Name: Fluke Electronics, DPM4-1G, part# 2631330, OR EQUIVALENT as follows:

3.1.20.2. Specifications/Salient Characteristics:

3.1.20.2.1. Pressure tester from -700 to 5000 mmHg, including user manual, power cord specific for the USA, a battery eliminator, and one 9 Volt alkaline Battery; lightweight, battery operated, test pressure, vacuum, and temperature; graphical display with at least 128x32 pixels.

4. QUANTITIES:

4.1.

Item #	Description*	Unit	Qty
0001	ANALYZER, ESU	EA	4
0002	INFUSION DEVICE ANALYZER	EA	3
0003	CALIBRATOR, AUDIOMETER	EA	2
0004	EEG SIMULATOR	EA	1
0005	ELECTRICAL SAFETY ANALYZER	EA	20
0006	GAS FLOW ANALYZER	EA	4
0007	GAS FLOW ANALYZER, MOBILE	EA	4
0008	HANDHELD HDTV PATTERN GENERATOR	EA	1
0009	TRACKER, HUNTRON	EA	2
0010	KEYSPAN HIGH SPEED USB TO SERIAL ADAPTER CISCO BREAK SEQUENCE	EA	10
0011	INCUBATOR ANALYZER	EA	1
0012	NETWORK AUTO-TESTER	EA	13
0013	FIELD SERVICE ENGINEER TOOL KIT	EA	20
0014	NETWORK SERVICE KIT	EA	4
0015	VITAL SIGNS SIMULATOR 2	EA	8
0016	SpO2 FUNCTIONAL TESTER	EA	6
0017	ULTRASOUND WATTMETER	EA	1
0018	WI-FI TESTER	EA	1
0019	3-YEAR GOLD TOOLS SUPPORT FOR 1TG2-3000	EA	1
0020	Digital Pressure Meter	EA	4

5. DELIVERY: JANUARY 2, 2018