

Statement of Work

ANALYZERS TEST EQUIPMENT

Southeast Louisiana Veterans Health Care System
New Orleans, LA

11/1/17

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. .. EEG SIMULATOR

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

3.1.3.2. Specifications/Salient Characteristics:

- 3.1.3.2.1. EEG simulator
- 3.1.3.2.2. Has 5 channel output of ABR, sine, square, and triangle waveforms
- 3.1.3.2.3. Ability to select amplitudes and frequencies

3.1.4. .. ELECTRICAL SAFETY ANALYZER

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

3.1.4.2. Specifications/Salient Characteristics:

- 3.1.4.2.1. Electrical safety analyzer with functionality of a simulator, multimeter, and electrical safety tester
- 3.1.4.2.2. Selection of two test loads
- 3.1.4.2.3. 20 A at 120 V current capability
- 3.1.4.2.4. Internal memory for at least 100 test records
- 3.1.4.2.5. USB connection for use with data viewer software (included)

3.1.5. .. GAS FLOW ANALYZER:

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

3.1.5.2. Specifications/Salient Characteristics:

- 3.1.5.2.1. Bi-directional flow, pressure, volume, and oxygen concentration, and pressure measurements
- 3.1.5.2.2. Capable of special HF mode of up to 900 BPM
- 3.1.5.2.3. Capable of displaying 21 ventilator parameters displayed at once on one screen
- 3.1.5.2.4. Capable of graphing minimum, maximum, average, absolute for all parameters
- 3.1.5.2.5. RS-232 and printer ports
- 3.1.5.2.6. Includes Windows-compatible graphics software

3.1.6. .. GAS FLOW ANALYZER, MOBILE:

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

3.1.6.2. Specifications/Salient Characteristics:

- 3.1.6.2.1. Bidirectional flow, volume, vacuum, pressure, and oxygen-concentration measurements
- 3.1.6.2.2. Onboard graphical display
- 3.1.6.2.3. Capable of storing results
- 3.1.6.2.4. Capable of trending and showing statistical analysis of all measured values
- 3.1.6.2.5. At least 16 ventilator parameter measurements
- 3.1.6.2.6. Portable capabilities

3.1.7. .. FIELD SERVICE ENGINEER TOOL KIT

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

3.1.7.2. Specifications/Salient Characteristics:

- 3.1.7.2.1. 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

3.1.8. .. NETWORK SERVICE KIT

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

3.1.8.2. Specifications/Salient Characteristics:

- 3.1.8.2.1. 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

3.1.9. .. VITAL SIGNS SIMULATOR 2

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

3.1.9.2. Specifications/Salient Characteristics:

- 3.1.9.2.1.** 8-in-1 multifunction simulator tests ECT, respiration, temperature, IBP, cardiac output, NIBP, SpO2, and Rainbow multi-wavelength waveforms
- 3.1.9.2.2.** SpO2 r-curve to test oximetry
- 3.1.9.2.3.** Repeatable NIBP simulation (+/- 2mmHg) for dynamic pressure repeatability testing
- 3.1.9.2.4.** Physiologically synchronized pulses over all parameters
- 3.1.9.2.5.** Onboard and customizable patient pre-sets and autosequences

3.1.10. SpO2 FUNCTIONAL TESTER

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

3.1.10.2. Specifications/Salient Characteristics:

- 3.1.10.2.1.** Rechargeable battery lasts 10 hours minimum
- 3.1.10.2.2.** signal strength indicator
- 3.1.10.2.3.** SpO2 saturation (80%, 85%, 90%, 95%, 97%, 98%, 99% and 100%)
- 3.1.10.2.4.** heart rate (30, 60, 80, 100, 120, 150, 245 Beats per minute)
- 3.1.10.2.5.** perfusion (0.2%, 2%, and 10%)
- 3.1.10.2.6.** R-Curves (Nonin, Masimo, Nellcor, Nihon Kohden, Mindray, GE, Philips, BCI)

3.1.11. ULTRASOUND WATTMETER

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

3.1.11.2. Specifications/Salient Characteristics:

- 3.1.11.2.1.** RS-232 port
- 3.1.11.2.2.** accommodates a variety of transducer shapes (2.65in diameter maximum)
- 3.1.11.2.3.** auto zero function
- 3.1.11.2.4.** compact, lightweight, portable

3.1.12. WI-FI TESTER

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

3.1.12.2. Specifications/Salient Characteristics:

- 3.1.12.2.1.** Troubleshooting capabilities (copper, fiber, and wifi)
- 3.1.12.2.2.** Dual 10/100/1G copper/fiber Ethernet test ports
- 3.1.12.2.3.** 802.11 a/b/g/b/ac Wi-fi radio
- 3.1.12.2.4.** one-button automated testing
- 3.1.12.2.5.** VoIP call monitoring and comprehensive logging
- 3.1.12.2.6.** automated Wi-fi discovery

3.1.13. 3-YEAR GOLD TOOLS SUPPORT FOR 1TG2-3000

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

3.1.13.2. Specifications/Salient Characteristics:

- 3.1.13.2.1.** 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

3.1.14. Digital Pressure Meter

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

3.1.14.2. Specifications/Salient Characteristics:

3.1.14.2.1. 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.

3.1.15. Cable Tester Kit with LCD Display

3.1.15.1. Suggested Manufacturer Brand Name: Fluke Networks, Model # CIQ-KIT, OR EQUIVALENT as follows:

3.1.15.2. Specifications/Salient Characteristics:

3.1.15.2.1. LCD instrument display; capable of troubleshooting connectivity problems and qualify copper cabling bandwidth; detects speed and duplex settings of attached switches and PCs; capable of graphically showing distance to faults; includes/capable of: tone generator, wiremapping, cable length display, distance to fault, continuity testing, Ethernet service detection, cable speed qualification, crosstalk detection, and impedance detection

3.1.16. Cordless Reciprocating Saw Kit

3.1.16.1. Suggested Manufacturer Brand Name: Milwaukee, Model # 2420-22, OR EQUIVALENT as follows:

3.1.16.2. Specifications/Salient Characteristics:

3.1.16.2.1. Capable of variable-speed cutting with an electric brake; 12.0 voltage; straight cutting action; ½" length of stroke; fixed shoe design; 0-3000 no load strokes per minute; cordless Lithium ion battery included with capacity of at least 1.5Ah; ½" universal tang blade type; soft grip handle

3.1.17. 4-Drawer Tool Cart

3.1.17.1. Suggested Manufacturer Brand Name: Extreme Tools, Model # EX3204TC, OR EQUIVALENT as follows:

3.1.17.2. Specifications/Salient Characteristics:

3.1.17.2.1. Dimensions: 32 ¼" W x 22 ¼" D x 40 ½" H; roller bearing drawer slide type; high gloss powder coat paint; full extension drawers with capacity of at least 100 lbs; shell and drawers made of steel; tubular lock and keys

4. QUANTITIES:

4.1.

Item #	Description*	Unit	Qty
0001	ANALYZER, ESU	EA	4
0002	INFUSION DEVICE ANALYZER	EA	3
0003	EEG SIMULATOR	EA	1
0004	ELECTRICAL SAFETY ANALYZER	EA	20
0005	GAS FLOW ANALYZER	EA	4
0006	GAS FLOW ANALYZER, MOBILE	EA	4
0007	FIELD SERVICE ENGINEER TOOL KIT	EA	20
0008	NETWORK SERVICE KIT	EA	4
0009	VITAL SIGNS SIMULATOR 2	EA	8
0010	SpO2 FUNCTIONAL TESTER	EA	6
0011	ULTRASOUND WATTMETER	EA	1
0012	WI-FI TESTER	EA	1
0013	3-YEAR GOLD TOOLS SUPPORT FOR 1TG2-3000	EA	1

0014	Digital Pressure Meter	EA	4
0015	Cable Tester Kit with LCD Display	EA	2
0016	Cordless Reciprocating Saw Kit	EA	4
0017	4-Drawer Tool Cart	EA	4