

PRODUCT SPECIFICATIONS

“SUPPLY AND INSTALLATION OF VETERINARY EQUIPMENTS” AGAINST RE-TENDER NOTICE c- hed/32/2025-3, DTD 04/03/2026

1. HYDRAULIC OPERATING TABLE

- 1- The System must have an Electric up and down function by remote
- 2- should be suitable for small animals' operation, such as Cat, Dog etc.
- 3-should reasonable structured, tight, high performance, easy operation and has very strong practicality
- 4-Product must be made of premium Grade 304 stainless steel
- 5-The Surface of the table-top should be flat shaped and should smooth and ease to clean and disinfect, for avoid cross infection
- 6-Equipment with fluid collecting through drainage pipe system
- 7- Table Should be CE Verified by European notified body, US FDA approved, CDSCO approved, TUV, ISO AND IEC Certified.
- 8-Length of table – 1220 mm (48”), Width of Table Top – 610mm (24”), Minimum Height – 710mm,
Maximum Height – preferably adjustable above 1m
- 9- Should have an optional battery backup and foot switch control

2. ENT HEADLIGHT

1. Light Source Type - LED (10W)
2. Illumination Range - 50,000 LUX
3. Light Colour - White
4. Colour Temperature - typ. 5,700 K
5. Illumination Spot Size - Adjustable
6. Nominal Voltage - 3-7 V DC
7. Nominal Current - max. 600 mA
8. Power Supply - 110-220 V
9. CRI - ≤ 90

10. Battery Run-time - 4 hours
11. Battery Charging-time - 2 Hour¹².
12. Weight - Approx. 260 g
13. Included Components - Headlight and Charger

3. ELECTRO CAUTERY UNIT

1. General:

- Should be a Microprocessor-based Smart 4 electro surgical unit with monopolar (cut & coag) and bipolar modes
- Integrated with feedback-controlled response system for user safety
- Ideal for surgeries requiring high precision and reliability

2. Required Features:

- Spray coagulation with good haemostasis effect and minimum cutting effect
- Pure and smooth cut bipolar output with non-sparking characteristic
- Prompt start even in irrigated procedures
- Automatically stops energy delivery upon completion of seal cycle

3. Required Technical Specifications:

- Cut Modes:

- Pure: 400W, 500Ω, 480kHz
- Blend 1: 250W, 500Ω, 480kHz
- Blend 2: 200W, 500Ω, 480kHz
- Endocut: 99%, 500Ω, 480kHz

- Coag Modes:

- Spray: 120W, 500Ω, 480kHz
- Fulgurate: 150W, 500Ω, 480kHz
- Dessicate: 150W, 500Ω, 480kHz

- Bipolar Modes:

- Soft: 80W, 100Ω, 480kHz

- Force: 80W, 100Ω, 480kHz

- Cut: 100W, 100Ω, 480kHz

4. Other Parameters:

- 7-segment LED display

- Dimension: 290mm x 105mm x 260mm

- Weight: 4kg

- Input supply voltage: 230VAC ±15% @ 50/60Hz

- Power: 400W

5. Required Accessories with Machine

- Surgical monopolar active handle

- Needle set (electrodes set for above probe)

- S.S. patient plate

- Patient plate cable cord

- Hand switch pencil

- Double paddle footswitch

- Bipolar forceps

- Bipolar forceps cable cord

- Single paddle foot switch

4. VETERINARY ULTRASOUND SYSTEM

- System Design: Must be a high-performance, compact, and lightweight laptop-style portable system (weight not exceeding 8.5 kg excluding battery).
- Display: Minimum 15-inch high-resolution LED/LCD monitor with a tilt capability of at least 60 degrees.
- Transducer Ports: System must have at least two (2) active universal transducer ports to allow quick switching between probes.
- Control Panel: Backlit alphanumeric keyboard with a dedicated 8-segment TGC for depth-wise gain adjustment.

Imaging & Diagnostic Capabilities

- Imaging Modes: Must support B-Mode, M-Mode, Dual (B/B), and Quad (4B) modes.
- Harmonic Imaging: Must include Phase Shift Harmonic Imaging (PSH) or equivalent technology to reduce noise and improve contrast resolution.

- Speckle Reduction: Must feature advanced adaptive speckle suppression (e.g., iClear) to enhance border detection.
- Spatial Compounding: Must include Spatial Compounding Imaging (e.g., iBeam) to improve detail resolution using multiple scan angles.
- Doppler Requirements: System must be equipped with PW (Pulsed Wave) Doppler and HPRF as a minimum for hemodynamic assessments.

Workflow & Data Management

- Auto-Optimization: One-touch image optimization for B-mode (Auto-gain/Auto-TGC).
- Storage: Integrated internal storage of at least 320 GB for patient data and images.
- Connectivity: * Minimum of 4 USB ports for data export.
- Integrated Ethernet port.
- DICOM 3.0 compliant for networking, storage, and print.
- Software: Must include a comprehensive calculation package for Abdomen, OB/GYN, Urology, and Small Parts.

Transducers (Probes)

- The system must be supplied with the following high-density, multi-frequency probes:
- Convex Probe: Frequency range 2.0 – 5.0 MHz (for Abdominal/OB scanning).
- Linear Probe: Frequency range 5.0 – 10.0 MHz or higher (for Small Parts/Vascular).
- Endocavity Probe: (Optional/As required) Frequency range 5.0 – 8.5 MHz with at least 120° Field of View.

Power & Portability

- Battery Power: Must include a built-in, rechargeable Lithium-ion battery providing a minimum of 100-120 minutes of continuous scanning time.
- Boot-up Time: Fast boot-up or "Sleep Mode" functionality to ensure readiness in emergency settings.

5. DIGITAL AUTOCLAVE

Construction & Build Quality

Chamber Material: Must be fabricated from heavy-gauge Stainless Steel (SS 304/316) with a Heavy-Duty Bottom Plate to ensure longevity and resistance to high-pressure fatigue.

Joints: All joints must be Argon Arc Welded to ensure leak-proof performance and a smooth finish that prevents bacterial buildup.

Dimensions: Internal chamber size must be approximately 12" x 13" (Diameter x Depth) to accommodate standard sterilization drums.

Performance & Operation

Dual Operation: The unit must be versatile, capable of being Electrically Operated (via immersion heater) or Gas Operated (via external burner) to ensure functionality during power outages.

Operating Pressure: Must maintain a steady working pressure between 15 and 18 PSI.

Operating Temperature: Must be calibrated to a standard sterilization temperature of 121°C.

Control System: Must feature a Digital Controller for precise temperature and time monitoring, paired with a mechanical Pressure Indicator (Gauge) for redundant safety verification.

Safety & Pressure Management

Redundant Safety: System must be equipped with at least Two (2) Independent Safety Valves set to release steam automatically if the internal pressure exceeds the safety limit.

Sealing: Must include a high-grade, heat-resistant gasket with a secure lid-locking mechanism.

6. VETERINARY PATIENT MONITOR

Feature Details

Display 8" Color TFT Touchscreen (800 x 600 resolution)

Waveforms Up to 4 traces (ECG, SpO₂, RR/EtCO₂) Weight ~3.1 kg (6.8 lbs.)

Dimensions 238 (W) x 250 (H) x 163 (D) mm

Data Storage 168 hours of trend data; 20 cases of 10-sec alarm waveforms

Power 100-240 VAC, 50/60Hz; DC input 18VDC

Battery Rechargeable Li-Ion (standard 3,250mAh); ~2–3 hours continuous use

Printer Built-in thermal printer (58mm width); speeds of 25, 50 mm/sec

Monitoring Parameters

ECG

Leads: 3-lead (Standard), 5-lead (Optional)

Heart Rate Range: 30 to 300 bpm (Horse, Dog); 30 to 350 bpm (Puppy, Cat).

Analysis: ST-segment detection (−2.0 to 2.0 mV), PVC count, and 3 types of arrhythmia analysis (Asystole, V-Tach, V-Fib).

• SpO₂:

- Saturation Range: 0% to 100% (Accuracy: ±2% between 70%–100%).
- Pulse Rate Range: 18 to 450 bpm.

• NIBP (Non-Invasive Blood Pressure):

Technology: SunTech™ Oscillometric with step deflation.

- Modes: Manual, Automatic, and Continuous.
- Systolic Range: 40 to 260 mmHg.

• Respiration:

- Method: Thoracic Impedance.
- Range: 5 to 120 bpm with Apnea alarm.

• Temperature:

- Range: 0 to 50°C (32 to 122°F).
- Channels: 1 channel (supports rectal or skin probes)

7. VETERINARY PULSEOXIMETER

Feature Details

Display 3.5" Color TFT LCD (320 x 480 resolution)

Viewing Modes Landscape and Portrait (Auto-rotating or manual)

Weight ~300g (Lightweight and handheld)

Dimensions 210 (W) x 75 (H) x 45 (D) mm

Data Memory Up to 30 days of trend data (at 10-second

intervals Alarms User-definable high/low limits for SpO₂ and

Pulse Rate Mounting Includes built-in IV pole mount clamp

SpO₂ (Oxygen Saturation):

- Range: 40% to 100%
- Accuracy: $\pm 2\%$ (within 70% to 100% range); unspecified below 70%
- Technology: Low perfusion measurement capability; Nellcor sensor compatibility

Pulse Rate (Heartbeat):

- Range: 30 to 250 bpm

Accuracy: ± 2 bpm

• Perfusion Index (PI):

- Indicator: Includes a Perfusion Index level bar to evaluate the quality of the SpO₂ measurement site.

Power & Battery

- Battery Type: Rechargeable Lithium-ion (High capacity: 5,500mAh)
- Battery Life: Up to 15–20 hours of continuous cordless use (depending on brightness settings)
- Charging Time: Approximately 6.5 hours
- Power Supply: Input 100–240V, 50/60Hz; Output 5V DC, 2.0A
- Vet-Specific Design: Includes specialized veterinary sensors (multisite clips for ears, tongue, or paw pads).
- Durability: Designed for mobile veterinary clinics and rugged clinical environments

8. WEIGHT MACHINE

- Max capacity – 200 kg
- Accuracy – 20g
- Pan size-500*500mm
- Class iii
- Material - MS
- Display - led