

ULTRASONIC SCALPEL –QTY1

TECHNICAL SPECIFICATION

- System should have a universal connector to connect Ultrasonic energy.
- System should have automatic instrument recognition.
- System should have a touch screen display for fast and setup, operation, and on-screen diagnostics.
- System should have a high-resolution display with wide viewing angles.
- System should have the ability for software updates via USB memory stick.
- System should have a potential equalization terminal for compatibility with other medical systems requiring such connections.
- System should have a single footswitch for operating ultrasonic energy.
- System should have the ability to select hand-switch or footswitch activation for Ultrasonic energy.
- System should not have minimal lateral thermal spread more than 1 mm.
- System should not have an auto switch off mechanism.
- System should have standby mode to ensure safety.
- System should come equipped with system diagnostics and troubleshooting guide to pinpoint any problems in the systems.
- System should have onscreen warning display system for generator overheating, generator software upgrade, handpiece errors and instrument errors.
- System should be able to power ultrasonic energy instruments with 55.5 KHz frequency.
- System should be compatible for open surgery and for laparoscopic surgery.
- System should be compatible with both 5mm and 10mm instruments.
- System should have at least 5 power settings levels with power level display for ultrasonic energy instruments.
- All hand probes for open and lap procedures should be able to simultaneously cut and coagulate tissues.
- Systems should be able to power ultrasonic energy hand instruments of 5mm shaft diameter for both open & laparoscopic procedures with the following specifications.

Open Surgery Instruments:

- 9cm shaft, curved, tapered tip for precise dissection, seals 5 mm vessels, as well as lymphatic with 16 mm active blade & 240- degree activation, triggers support multiple hand positions.
- 17cm shaft, curved, tapered tip for precise dissection, seals 5 mm vessels, as well as lymphatic with 16 mm active blade & 240- degree activation, triggers support multiple hand positions.

- 5mm Hand Activated Curved Coagulating Shears capable of sealing blood vessels up to 5mm in diameter, 23 cm shaft length, ergonomic handle.
- Curved Blade having telescoping shaft (10cm-14cm) with integrated hand activation control buttons.
- Dissecting Hook having telescoping shaft (10cm-14cm) with integrated hand activation control buttons.
- Combination Hook Blade, 10cm long.

Laparoscopic Surgery Instruments:

- 5mm Lap Hand Activated Curved Coagulating Shears capable of sealing blood vessels up to 5mm in diameter, 36 cm and 45 cm shaft length, ergonomic handle.
- Hand probe with 5mm shaft diameter with 110 degrees of articulation with 360 degree of shaft rotation with straight tip in the following shaft length 35 cm and seals and transect vessels up to 7mm. Both open and lap devices should be having temperature-controlled mechanism within the jaw controlling temperature below 100 degree Celsius.
- 3. 5mm Lap Dissecting Hook, 32 cm long.

→ **System should comprise of the following Hardware:**

1. Generator -1
2. Footswitch & Cable Accessories: 1
3. Handpiece (lap)- 1 pc
4. Hand Switching Adaptor
5. Adaptors for ultrasonic energy instruments.

Required Ultrasonic Energy Instruments:

- 9cm shaft, curved, tapered tip for precise dissection, seals 5 mm vessels, as well as lymphatic with 16 mm active blade & 240- degree activation, triggers support multiple hand positions – 1 Pc
- 17 cm shaft, curved, tapered tip for precise dissection, seals 5 mm vessels, as well as lymphatic with 16 mm active blade & 240-degree activation, triggers support multiple hand positions – 1 Pc
- 5mm Hand Activated Curved Coagulating Shears capable of sealing blood vessels up to 5mm in diameter with 23 cm shaft length, ergonomic handle – 1 Pc
- 5mm Hand Activated Curved Coagulating Shears capable of sealing blood vessels up to 5mm in diameter with 36 cm shaft length, ergonomic handle – 3 Pc
- 5mm Lap Dissecting Hook, 32cm long- 1



POWER SUPPLY REQUIREMENT

- Power input to be 220-240 VAC, 50Hz fitted with UK Plug.

SAFETY, STANDARD AND TRAINING

- System should conform to the following international standards EN (IEC) 60601-1, EN (IEC) 60601-1-2, EN (IEC) 60601-2-2, EN (IEC) 60601-1-8 10 System should provide Class 1 protection against electric shock
- Manufacturer should have ISO certification for quality standard.
- Comprehensive training for operator and service training for In-house biomedical engineer is mandatory.
- On-site comprehensive warranty for 2 years.
- Availability of spare parts and all other accessories must be for 10 years.

DOCUMENTATION

- User/Technical/maintenance manual to be supplied in English.
- Certificate of calibration and inspection should be submitted.

ADDITIONAL CONDITIONS

- Any other essential hardware/software/items required to make all above things functional should be quoted, otherwise it will be treated that same will be supplied free of cost.
- All products shall be same manufacturer & should be US FDA or European CE Approved
- Original catalogue with detailed literature should be provided.
- Manufacturer or authorized supplier should install and successfully demonstrate the unit.
- Authorization letter should be submitted.

