

Add Hi-Tech Precision to your Surgical Expertise.





Complete range of **Electro Surgical Solutions** 









## Complete range of electro surgical solutions...



# **Technical Specifications**

**MONOPOLAR CUT :** Pure Sine wave 390 kHz Low Cut- Continues, 300 W at 300  $\Omega$ , CF 1.5, Low Volt Pure - Continues, 350 W at 300  $\Omega$ , CF 1.5, High Volt Blend - Bursts 29 kHz, 200 W at 300  $\Omega$ , CF 2.5 Endo Cut - Pulse, 350 W at 300  $\Omega$ , CF 1.5

**BIPOLAR:** Pure Sine wave 390 kHz Micro - Lower voltage, 100 W at 100  $\Omega$ , CF 1.5 Standard - Medium voltage, 100 W at 100  $\Omega$ , CF 1.5 Force - Higher voltage, 100 W at 100  $\Omega$ , CF 1.5 Bipolar Cut - Higher voltage, 100 W at 100  $\Omega$ , CF 1.5

**MONOPOLAR COAG :** Damped Sine wave 460 kHz Soft - Continues at 84 kHz, 120 W at 500  $\Omega$ , CF 4.0, Swift - Repetition Frequency 42 kHz, 120 W at 500  $\Omega$ , CF 6.2 Fulgurate - Repetition Frequency 34 kHz, 120 W at 500  $\Omega$ , CF 7.0 Spray - Randomized Repetition 34kHz<f<50kHz, 120W at 500  $\Omega$ , CF 8.0

#### **DESIGN STANDARD**

Classification according to the EC- Directive 93/ 42/ EEC: Class IIb General Safety Standards: IEC 60601-1-1, IEC 60601-2-2 EMI/EMC Compatibility Standard: IEC 60601-1-2 IS Safety Standard: IS 7583

Note: Unit is available in other HF power ratings on request.

#### **LEAKAGE CURRENTS**

- RF leakage current Monopolar : < 150 mA rms
  - Bipolar : < 60 mA rms
- Low Frequency leakage currents
  - Normal polarity, intact ground :  $< 10 \mu A$
  - Normal polarity, ground open : < 50 μA

#### **FEEDBACK SYSTEM**

- 3 Microprocessor Controlled 6SENSE Technology with sampling rate above 4000 sense/second
- Maximum output power deviation < 15% or 5 watts, whichever is greater at any setting with PER-98

### **PREM SYSTEM**

Measuring Frequency : 85 kHz  $\pm$  10 kHz.

Measuring current : < 10 μA Acceptable Resistance Range

Dual Area PREM Patient Return Electrode : 5-135  $\Omega$  (Adaptive)

Single Area Patient Return Electrode :  $< 10 \Omega$ 

**INPUT POWER** (other ratings available on request) Operating Voltage: 180-265 Volt AC, 50-60 Hz

Max. Power input: 1000 VA, Fuse: 6 A, UPS Backup: 1KVA

#### **DIMENSIONS**

 $L \times W \times H \text{ in cm} - 38.0 \times 30.5 \times 11.5$ , Weight in kg < 5.0

## **Features**

**TFT Screen :** TFT panel operation for flexible use with upgradable Internet Enable and Data Logging.

**6SENSE Technology :** Maintain set power over wider range of tissue by Tissue Feedback Technology.

PREM: Patient Return Electrode Monitoring gives an Alarm providing safety against the Return Electrode site burns.

Randomized SPRAY Coag: Homogeneous, superficial, faster Coagulation over larger area.

Self Diagnosis: Ensure the ESU with accessories are safe for functioning & display Error Codes if any.

Bipolar Cut: This mode can be used for bipolar cutting with hooks and other cutting devices.

Upgradability: Argon Beam Coagulation, Ultrasonic Aspirator, Smoke Evacuator, Suction Irrigation module.

**User Programmable:** THIRTY user settable programs with case names helps in setting the system.

BiCoag Alarm: Audio feedback after completion of Bipolar Coag, reduces charring and sticking.

AutoBip (Optional): Automatic Start & Stop of Bipolar current by tissue sensing without foot switch activation.

Pulse/Endo Cut: Tissue feedback Pulse Interval controlled Pulse Cut for Polypectomy & Papillotomy.

**Desiccate Coag:** Faster cutting with coagulation for thicker tissues & soft coagulation.

Remote Power Settings: Change mode and power from sterile field by normal Handswitch Pencil.

Foot Switches / Pedals: Explosion Proof (Fire Resistance) and Water Proof Foot Pedals.

**Time Out Function (Optional):** Automatically stops the HF output if prolong unintended activation.

Surgical Applications: Useful for wide range of surgical application as: Plastic, Neuro, ENT, Spine,

Opthal, Laparo Surgery, Endo, GI, Ortho, Open & General Surgery, Onco, Gynecology, Hernia,

GI Endocut, Papillotomy, Polypectomy, Under Water, Urology, Gynec TCRE, Hysteroscopy, Thoracotomy,

Thoracic and Cardiac Surgery. Unit is suitable for all kind of Open, Endoscopic, Laparoscopic and Minimally Invasive Surgery.





