



Add Hi-Tech Precision to your Surgical Expertise...



Excelling Through Excellence

# Shalya Sigma

4<sup>th</sup> Generation 400W ESU



Complete range of  
Electro Surgical Solutions



Electrosurgical Generator



ISO  
13485

# Technical Specifications of **Shalya Sigma** 400W Electrosurgery Unit

**MONOPOLAR CUT :** Pure Sine wave 390 kHz  
Low - Continues, 300 W at 300  $\Omega$ , CF 1.5, Low Volt  
Pure - Continues, 400 W at 300  $\Omega$ , CF 1.5, High Volt  
Blend - Bursts 29 kHz, 50%, 250 W at 300  $\Omega$ , CF 2.5  
Endo Cut - Pulse, 400 W at 300  $\Omega$ , CF 1.5

**BIPOLAR CUT :** Pure Sine wave 390 kHz  
Macro - Precise bipolar cutting with hemostasis, 100 W at 100  $\Omega$ , CF 1.5  
BiCut - High voltage clean bipolar cutting, 100 W at 100  $\Omega$ , CF 1.5

**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  $\mu$ A

**FEEDBACK SYSTEM**

- 3 Microprocessor Controlled 6SENSE Technology with sampling rate above 4,00,000 sense/second
- Maximum output power deviation < 15% or 5 watts, whichever is greater at any setting with PER-98

**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 : 1.2KVA

**MONOPOLAR COAG :** Damped Sine wave 460 kHz  
Soft - Continues at 83 kHz, 150 W at 500  $\Omega$ , CF 4.0,  
Swift - Repetition Frequency 36 kHz, 120 W at 500  $\Omega$ , CF 6.0  
Fulgurate - Repetition Frequency 29 kHz, 120 W at 500  $\Omega$ , CF 7.0  
Spray - Randomized Repetition 23 kHz < f < 35kHz, 120W at 500  $\Omega$ , CF 8.0

**BIPOLAR COAG :** 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

**PREM SYSTEM**  
Measuring Frequency : 80 kHz  $\pm$  10 kHz.  
Measuring current : < 10  $\mu$ A  
Acceptable Resistance Range  
Dual Area PREM Patient Return Electrode : 5-135  $\Omega$  (Adaptive)  
Single Area Patient Return Electrode : < 10  $\Omega$

**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

**DIMENSIONS**  
L x W x H in cm - 38 x 31 x 12, Weight in kg < 6

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

## Features of **Shalya Sigma** 400W Electrosurgery Unit

**5" LCD Touch Screen :** Allows quick, easy & interactive experience to users.

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

**PREM :** Patient Return Electrode Monitoring provides safety against the patient return electrode site burns.

**Endo Cut Mode :** Allows pulse interval controlled cutting for Polypectomy and Papillotomy.

**Randomized SPRAY Coag :** Provides homogeneous, superficial & faster coagulation over larger area.

**Bipolar Cut & Coag modes :** Independent display setting using its respective footswitch.

**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.

**Footswitch :** Enhanced with a toggle button to switch between modes along with on-screen indication. Unit also supports **wireless** footswitch for clean & wire-free surgical environment.

**Smart Surgical Assist :** The program manager allows smart access to programs & settings.

**Self-illuminating socket :** Helps during power settings and RF activation to indicate use of respective RF port.

**Self Diagnosis :** Ensures the ESU with accessories are safe for functioning & display error codes if any.

**User Programmable :** 20 user settable programs with procedure & surgeon name.

**Remote Power Settings (Optional) :** To change mode and power from sterile field by normal Handswitch Pencil.

**Time Out Function (Optional) :** Automatically stops the HF output incase of prolonged activation.

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

**Surgical Applications :** Useful for wide range of surgical application as : Plastic, Neuro, ENT, Spine, Ophthal, Laparo Surgery, Ortho, Open & General Surgery, Pediatric, 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.

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## Shalya Extended Range



## Shalya Vista



## Shalya MX



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