

# **Electro Surgical Generator**

# **SMART4** Plus



## **Safety Features**

Protection Class According to EN 60601-1

Body Protected and cardiac protected design

HF Leakage current<150mA

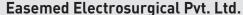
**Patient Plate Monitoring System** 

Easemed new SMART4 plus is the most versatile Electro Surgical Generator. It offers features and performance, never before available in a single generator.

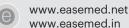
The SMART4 plus has spray and coagulation which rivals the best spark gap generators and with minimum cutting effect. The blend gives a good Hemostasis effect than cutting and pure cut is exceptionally smooth and starts promptly even in irrigated procedures.

The isolated bipolar output, which has a non-sparking characteristic, is ideal for microsurgery, Neuro Surgery, Laproscopy and other applications. SMART4 plus meets the surgeon's needs in the wide range of general procedures and in specialties including Gynecology, Urology, Neurology, Thorasic, Plastic and Reconstructive Surgery.













### **Product Features**

#### **CUT MODE**

**PURE** - A high-frequency alternating current yields smooth, rapid cuts that evoke little to no hemostasis.

**BLEND 1** - Preset blended cut modes give the surgeon varying degrees of hemostasis in cut mode.

 $\,$  BLEND 2 - The mode is used for the vaporization of prostatic tissue or any fat tissue. The higher output wattage gives fast cutting effect of the tissue.

**ENDOCUT** - The mode is used to automatically control cut system to reduce the complication rate of endoscopic sphincterotomy (EST) and serum hyperamylasemia after EST compared to the conventional blended cut mode.

#### **COAG MODE**

SPRAY - Spray output is made for direct coagulation at the tissue with spark. This spark does not give any cutting effect as its crest factor is high.

**FORCE** - This mode is a greater degree of homeostasis and covers all demands of standard coagulation. This produce the fine tune waveform that creates superficial resistance in the tissue resulting in superior coagulation where the tissue destroyed by hyper evaporation.

**FULGURATE** - Sparking the tissue to lead to coagulation. There is no tissue-electrode contact; rather, voltage is raised in order to incite a spark between electrodes in order to coagulate the tissue in between.

**DESICCATE** - Coagulation in which the active electrode is in direct contact with the tissue is referred to as desiccation and is the type of coagulation used in most surgeries It ensures pinpoint desiccation with less destruction of peripheral tissue.

#### **BIPOLAR MODE**

**MICRO** - High Voltage force coagulation for special purpose when speed is required.

 $\ensuremath{\mathsf{MACRO}}$  - For highly precise control over coagulation process and privations of carbonization.

**CUT** - This Bipolar CUT technology nearly eliminate excessive current, even during precision cutting in minute tissue structure.

**AUTO -** Coagulation start by pressing the footswitch and stops output and audio signal automatically when the tissue is coagulated.

### **Salient Features**

• 99 User settable program mode

• Frequency: 480khz

• Display: 7 segment LED

• Net Weight (Inc Accessories): 8.5 Kg

• Dimension: 410 mm (L) x 355 mm (W) x 155 mm (H)

• Input Supply Voltage 110V / 230 VAC (+/-15%) 50 Hz

• Separates Monopolar & Bipolar foot switches

### **Technical Specification**

CUT			
MODE	MAX POWER	LOAD	CREAST FACTOR
PURE CUT	400 W	300Ω	1.5
BLEND 1	250 W	300Ω	1.5
BLEND 2	200 W	300Ω	1.5
ENDOCUT	99 %	300Ω	1.5
COAG			
MODE	MAX POWER	LOAD	CREAST FACTOR
SPRAY	120 W	300Ω	7
FORCE	120 W	300Ω	6.5
FULGURATE	150 W	300Ω	6
DESICCATE	150 W	300Ω	6
BIPOLAR			
MODE	MAX POWER	LOAD	CREAST FACTOR
MICRO	80 W	100Ω	1.5
MACRO	80 W	100Ω	1.5
CUT	100W	100Ω	1.5
AUTO	100W	100Ω	1.5

## **Standard Accessories**



Chuck Handle with Electrodes



Bipolar Forcep with Cable





Monopolar / Bipolar Foot switch



Disposable Hand Switch Pencil



Silicon Patient Plate with Cord