



Since 1997.....

*Only Performance
matters...
...not size*

CE
1639

E-Lite

Microcontroller Based Digital
ELECTROSURGICAL UNIT



Alan's electrosurgical unit (Diathermy) is designed with latest miniature electronic circuit design technology. The advanced microcontroller based technology helps in achieving the desired tissue effects. It is Small in Size but Surprises on Performance.

+ **SAFETY**

- Patient Plate Contact Quality Monitoring System.
- HF leakage monitoring & controlling systems.
- Real-Time Tissue impedance monitoring for power control.
- Power up Self-Test to ensure the unit healthiness.
- Handswitch and Footswitch short detection during Self-Test.
- Multiple microcontroller supervision for RF power accuracy.

+ **RELIABILITY**

- Built in line filter protects from voltage surges and bad line conditions hence no need to use Spike Buster.
- No need of voltage stabilizer, can work in lower voltage.
- Works on Generator, Inverter & UPS.
- Convection Cooling System offers better Reliability.
- Alan's proven track record for more than 13 years.

GENERAL FEATURES

- Feather touch membrane keyboard for Power, Mode, Program and Footswitch selection etc. for easy operation of Machine.
- Isolated Monopolar & Bipolar outputs.
- Simultaneous Coagulation for 2 surgeons in Monopolar mode.
- Monopolar outputs can be activated via Handswitch and Footswitch.
- Digital volume control and audio-visual indications for all outputs.
- Timeout function.
- Restoration of previous activated power settings.
- Multiple microcontrollers' supervision automatic diagnosis enables instant power response against the tissue density & impedance variation and Adjust Power.
- Built with Return Electrode/Patient Plate Contact Quality Monitoring System.
- PPCM monitors Split/Non-Split type patient plates and deactivates output power with audio-visual alarm during improper contact between patient and patient plate to eliminate the risk of patient burns.
- Using Alan's 3 pedal footswitch Monopolar and Bipolar can be operated without changing any settings in the machine.
- 3 Pedal Footswitch is explosion proof and water proof.
- Compatible with Wireless Footswitch.
- Well suited for Underwater (TURP), Micro, Major, Gynaec, General and all other Surgeries
- Maximum output of 300 Watts.

+ CLINICAL BENEFITS

MONOPOLAR CUTTING

- **Pure** : Monopolar Cut mode is for Underwater (TURP) and General Surgeries
- **LowCut** : Mode specifically tailored for Laparoscopy
- **Blend** : Cutting with Coagulation effect.

MONOPOLAR COAGULATION

- **Fulgurate/ Force** : A low spray waveform suitable for non-contact coagulation on oozing surfaces and (TURP) underwater coagulation
- **Desiccate** : Standard Coagulation Mode.

BIPOLAR

- **Cut/Standard** : Best coagulation mode when used with graspers. especially designed for Bipolar Scissors.
- **Force/Macro** : Faster Bipolar Coagulation

RF OUTPUT CHARACTERISTICS

MONOPOLAR CUT

Pure	: 300 Watts / 300 Ohms
Low Cut	: 200 Watts / 300 Ohms
Blend	: 100 Watts / 300 Ohms

MONOPOLAR COAGULATION

Fulgurate	: 100 Watts / 500 Ohms
Desiccate	: 100 Watts / 500 Ohms

BIPOLAR

Cut / Standard	: 80 Watts / 100 Ohms
Force / Macro	: 80 Watts / 100 Ohms

INPUT SUPPLY

Input Supply	: 230VAC $\pm$ 20% 50 Hz
Power Consumption	: 500VA Max.
Loading Duty Factor	: 10Sec (Active) / 30Sec (Pause)
Input Fuse	: 3.15A T
Output Control	: Digital Display, Push buttons in all Modes.

SAFETY STANDARDS

Basic Construction	: Accordance with IEC 60601 - 1, IEC 60601 - 1 - 2 & IEC 60601 - 2 - 2
Protection Class	: 1
Unit Type	: CF
All Outputs	: Floating Outputs
Electrical Potential Balancing	: Connecting Pin and Indicated by Symbol.
Weight	: 3.2 Kg.
Size (in mm)	: 310(W) x 150(H) x 280(D)

★ Optional Feature

- Specifications are subject to change due to continual Development & upgradation.
- ESU is Also Popularly Known as E. S. Diathermy & E.S. Cautey



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