

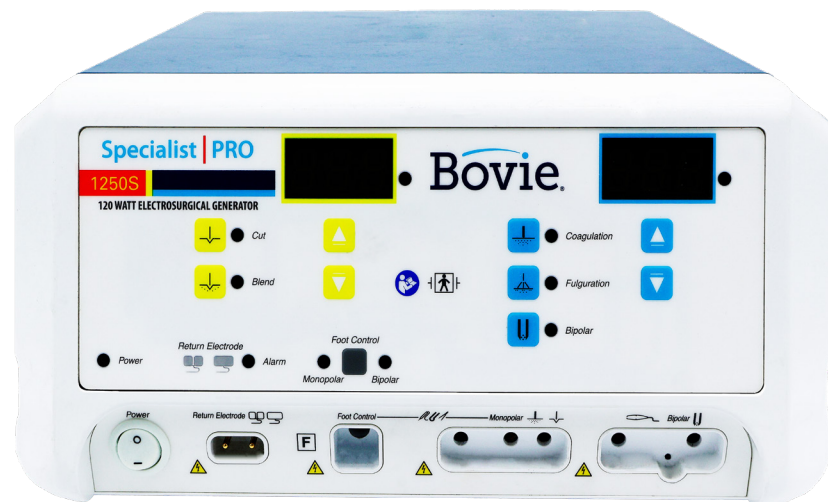
Bovie Specialist PRO Electrosurgical Unit



The **Bovie Specialist PRO** is a multifunctional generator that contains a sleek push button design and is suitable for most monopolar and bipolar surgical procedures. This unit is the electrosurgery answer for desired physician offices and specialty facilities. The Specialist PRO provides 5 energy outputs capable of up to 120 watts of power; modalities consist of Cut, Blend, Coagulation, Fulguration and Standard Bipolar. The generator incorporates multiple safety features such as BovieNEM (Neutral Electrode Monitoring) pad sensing technology, BovieDED (Digital Error Detection), audible alert tones and self-test circuits.

Features

- Large illuminated digital displays
- Ample raised push button power-controls provide rapid power adjustments.
- Self-test circuits
- Audible tones
- Discreet outputs FCFS (First Come First Served)
- Isolated circuitry
- Digital Error Detection



Specifications

Dimensions

Height: 6 in (15.2 cm)
Width: 10.25 in (26 cm)
Depth: 12 in (30.5 cm)
Weight: < 9 lb (<4 kg)

Energy Settings

Cut: 120 Watts
Blend: 90 Watts
Coagulation: 80 Watts
Fulguration: 40 Watts
Bipolar: 30 Watts

Input Power

VAC: 100 – 240
Mains line frequency range (nominal): 50 – 60 Hz
Power consumption: 270 VA
Fuses (two): 3.15A (Slow Blow)

Operating Parameters

Ambient temperature range: 10° to 40° C (50° to 104° F)
Relative humidity: 30% to 75%, non-condensing
Atmospheric pressure: 70kPa to 106kPa
Warm-up time: If transported or stored at temperatures outside the operating temperature range, allow one hour for the generator to reach room temperature before use.

Audio Volume

Activation Tone

Volume (adjustable): 40 to > 65 dB

Frequency

Cut: 610 Hz ± 10 Hz
Blend: 610 Hz ± 10 Hz
Pinpoint: 840 Hz ± 10 Hz
Spray: 840 Hz ± 10 Hz
Bipolar: 840 Hz ± 10 Hz

Duration: Continuous while the generator is activated

Alarm Tone

Volume (not adjustable): 25 dBA at a distance of one meter
Frequency: 2.44 kHz / 450 ms / 1.22 kHz / 450 ms



Specifications

Return Electrode Sensing

Single Plate

Trip resistance: 0Ω to $8 \Omega \pm 1 \Omega$

Continuous measurement:

Once the system establishes the single-plate electrode resistance, an increase of $20 \Omega \pm 25 \Omega$ in resistance will cause an alarm. When the alarm condition exists, the system deactivates output power.

Split Plate

Trip resistance: $10 \Omega \pm 5 \Omega$ to $135 \Omega \pm 10 \Omega$

Continuous measurement:

Once the system establishes the split-plate electrode resistance, an increase of $(35 \pm 5)\%$ in resistance will cause an alarm. When the alarm condition exists, the system deactivates output power.

Low Frequency (50-60 Hz) Leakage Current

Enclosure source current, ground open:

< 500 μ A 220 - 240 VAC

< 300 μ A 90 - 120 VAC

Source current, patient leads, all outputs:

Normal polarity, intact ground: < 10 μ A

Normal polarity, ground open: < 50 μ A

Reverse polarity, ground open: < 50 μ A

Sink current at high line, all inputs: < 50 μ A

High Frequency (RF) Leak- age Current

Bipolar RF leakage current: < 39 mA rms

Monopolar RF leakage current: (additional tolerance) < 150 mA rms

Duty Cycle

Under **Maximum power** settings and rated load conditions (Cut, 120 watt @ 500 ohm load), the generator is suitable for activation times of 10 seconds on, 30 seconds off for one hour.

The **Internal temperature** of the unit is continuously monitored. If the temperature rises above 850 C, the alarm will sound and output power will be deactivated.

Storage

Ambient temperature range: 10° to 30° C (68° to 86° F)

Relative humidity: 10% to 75%, non-condensing

Atmospheric pressure: 50kPa to 106kPa

Transport

Ambient temperature range: -40° to +70° C

Relative humidity: 10% to 100%, including condensation

Atmospheric pressure: 50kPa to 106kPa

