

# 1. General Information

- **Equipment:** Electrosurgical Generator (High-Frequency).
  - **Intended Use:** Precision cutting, hemostatic coagulation, large-diameter vessel sealing, and specialized soft tissue effects.
  - **Clinical Use:** Multidisciplinary application in General Surgery, Gynecology, Urology, Endoscopy, and Visceral Surgery.
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# 2. Physical Characteristics & Power

- **Dimensions:** Approximately 400×150×400 mm (W × H × D).
  - **Weight:** ≤10 kg (portable tabletop design).
  - **Housing:** Impact-resistant, fluid-sealed (IPX-rated) enclosure with easy-clean surfaces.
  - **Cooling:** Passive convection or low-noise fan-assisted cooling.
  - **Electrical Rating:** 220-240 VAC.
  - **Supply Frequency:** 50 Hz.
  - **Consumption:** Max HF output ≈500 VA; Standby <40 VA.
  - **Safety Features:** Integrated power fuse and potential equalization (grounding) stud.
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# 3. Output & Performance

The generator must utilize intelligent tissue-sensing technology to modulate power in real-time.

Parameter	Specification Range
<b>Max. CUT Output</b>	300–400 Watts (at 300–500Ω)
<b>Max. COAG Output</b>	120–200 Watts
<b>Bipolar Sealing</b>	Specialized high-current mode for vessels up to 7 mm
<b>HF Frequency</b>	350 kHz to 4 MHz (Application dependent)

## Modes & Programming

- **Modes Supported:** Pure Cut, Blend, Contact Coag, Spray Coag, Bipolar Cut, Bipolar Coag, and Advanced Vessel Sealing.
  - **Program Groups:** Categorized by specialty.
  - **Storage:** Support for >100 user-defined procedure presets to ensure rapid theater setup.
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## 4. Operating Conditions

- **Ambient Temperature:** 10°C to 40°C.
  - **Humidity:** 30% to 75% non-condensing.
  - **Interface:** Color touchscreen with digital feedback on tissue impedance and "Time-to-Seal" progress.
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## 5. Safety & Standards

- **Classification:** Class IIb (EU 93/42/EEC) / Class II (FDA).
  - **Protection Class:** Class I; Applied Part Type CF (Cardiac Floating) for maximum patient protection.
  - **Return Electrode Monitoring (REM):** Mandatory contact quality monitoring for neutral pads to prevent patient burns.
  - **Leakage Currents:** Compliant with IEC 60601-1 standards (<10µA low frequency).
  - **Alarms:** Visual and audible alerts for "Neutral Electrode Disconnection," "System Error," and "Incomplete Seal."
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## 6. Consumables & Accessories

- **Monopolar Accessories:** Hand-switch pencils, foot-switches, and variety of electrodes (blade, needle, ball).
- **Bipolar Accessories:** Forceps and specialized vessel-sealing instruments with integrated cutting blades.
- **Neutral Electrodes:** Compatible with both split-type (for REM) and non-split patient plates.
- **Sterilization:** Generator surface must be compatible with standard hospital disinfectants (IPA or quaternary ammonium); accessories must be autoclavable (if reusable).