

ABBOTT IONICRF GENERATOR



ABOUT

The **Abbott IonicRF Generator** is a radiofrequency system designed to assist physicians in managing chronic pain through targeted neural tissue lesioning. Used with compatible cannulae and electrodes, the generator delivers controlled RF energy to specific nerves during pain management procedures. The system includes built-in sensory and motor stimulation features that help clinicians confirm accurate electrode placement before treatment begins. Its touchscreen interface provides a clear, user-friendly system while also supporting procedure monitoring and data management. Compact and portable, the generator can be used on a countertop or mounted to a compatible roll stand, making it well suited for pain management and interventional procedure suites.



FEATURES

- **Radiofrequency:** Delivers controlled RF energy to targeted nerves.
- **Multiple Modes:** Supports lesioning, pulsed RF, and pulsed dose therapies, with the ability to treat multiple electrode sites simultaneously.
- **Sensory and Motor Stimulation:** Built-in stimulation functions help clinicians verify proper electrode placement prior to treatment.
- **Touchscreen Controls:** Integrated display provides intuitive system operation, procedure monitoring, and data management.
- **Flexible Electrode Compatibility:** Works with a range of compatible electrodes, cannulae, and probes, including multi-electrode RF probes designed for specialized procedures.



SPECIFICATIONS



DIMENSIONS

Height: 13.9 in (35.3 cm)

Width: 12.9 in (32.8 cm)

Depth: 11.3 in (32.8 cm)

Weight: 16 lb (7.3 kg)

DISPLAY

Type: LCD

Size: 12.1 in (30.7 cm)

INPUT / OUTPUT

Ports for Electrode: 4

Ports for Grounding Pad: 1

USB Ports: 2

Equipotential Port: 1

POWER

Maximum Total Power Output: 50 W; Maximum total power output (The sum of all the RF power entering the patient from all active electrodes) is hardware and software limited to 50 W total. The power is distributed as necessary to raise the electrodes to the desired set temperature.

Maximum Total Current Output: 700 mA

Measuring Frequency: 460 kHz \pm 3%

Impedance

- Stimulation: 50-1500 Ω
- Ablation: 47-1500 Ω (prior to RF output) and 31-1500 Ω (during RF output)

Generator Temperature Accuracy: \pm 2°C

System Temperature Accuracy: \pm 7°C

SENSORY STIMULATION

Electrode: Up to 4 (only one can be active at a time); monopolar

Maximum Voltage: 0.5-5 V (default 3 V)

Frequency: 10, 20, 50, 75, 100, 150, 180, 200 Hz (default 50 Hz)

Pulse Width: 0.1, 0.2, 0.5, and 1 ms (default 1 ms)

Voltage Step Size: 0.01, 0.10 (default 0.1)

Output Voltage and Accuracy: 0-5 V; \pm 5% for voltage \geq 1V and \pm 50 mV for voltage $<$ 1V

Output Frequency and Accuracy: 10-200 Hz \pm 3%

Output Pulse Width and Accuracy: 0.10-1 ms \pm 15% for impedance $>$ 100 Ω and \pm 25% for impedance \leq 100 Ω

MOTOR STIMULATION

Electrode: Up to 4 (only one can be active at a time); monopolar

Maximum Voltage: 0.5-5 V (default 3 V)

Frequency: 2 or 5 Hz (default 2 Hz)

Pulse Width: 0.1, 0.2, 0.5, and 1 ms (default 1 ms)

Voltage Step Size: 0.01, 0.10 (default 0.1)

Output Voltage and Accuracy: 0-5 V; \pm 5% for voltage \geq 1V and \pm 50 mV for voltage $<$ 1V

Output Frequency and Accuracy: 2-5 Hz \pm 3%

Output Pulse Width and Accuracy: 0.10-1 ms \pm 15% for impedance $>$ 100 Ω and \pm 25% for impedance \leq 100 Ω

SPECIFICATIONS



LESION MODE

Electrode: Up to 4; monopolar and bipolar

RF Waveform: Sinusoidal

Target Temperature: 50°-90°C (default 80°C)

Lesion/dwell Time: 1-600 seconds (default 60 seconds)

Stagger: Off, On: 0-10 seconds (default Off)

Output Voltage and Accuracy: 0-141 VRMS \pm 5%

PULSED RF MODE

Electrode: Up to 4; monopolar and/or bipolar

RF Waveform: Sinusoidal

Maximum Temperature: 42°-49°C (default 42°C)

Target Voltage: 30-75 VRMS (default 45 VRMS)

Lesion Time: 1-1800 seconds (default 120 seconds)

Pulse Width: 5, 8, 20, or 50 ms (default 20 ms)

Frequency: 1, 2, 5, or 10 Hz (default 2 Hz)

Output Voltage and Accuracy: 30-75 V \pm 15%

Maximum Output Voltage Peak Value: \leq 230 Vpk

Output Frequency and Accuracy: 1, 2, 5, 10 Hz \pm 5%

Output Pulse Width and Accuracy: 5, 8, 20, or 50 ms \pm 5%

PULSED DOSE MODE

Electrode: Up to 4; monopolar

RF Waveform: Sinusoidal

Maximum Temperature: 42°-49°C (default 42°C)

Target Voltage: 30-75 VRMS (default 45 VRMS)

Dose Count (doses): 120-960 (default 240)

Pulse Width: 5, 8, 20, or 50 ms (default 20 ms)

Frequency: 1, 2, 5, or 10 Hz (default 2 Hz)

Output Voltage and Accuracy: 30-75 V \pm 15%

Maximum Output Voltage Peak Value: \leq 230 Vpk

Output Frequency and Accuracy: 1, 2, 5, 10 Hz \pm 5%

Output Pulse Width and Accuracy: 5, 8, 20, or 50 ms \pm 5%