



480kHz

50W

LEANGEN-480k-50-M

OEM 480kHz Radiofrequency Generator

LEANGEN-480k-50-M is a compact solid-state OEM Generator Module conceived for demanding ISM applications requiring state-of-the-art technology, absolute signal purity, flexibility of configuration, modern digital control, high energy efficiency and long-term reliability. In particular, its unique characteristics have been shaped to meet the requirements of advanced medical applications in the field of mini-invasive surgery.

LEANGEN-480k-50-M is powered at 32Vdc and generates a sinusoidal output at 480kHz, accurately adjustable from 0 to 50W, referred to a 100 Ω resistive load.

The module is available with a simple analogue user interface or, in alternative, with an easy high-speed serial interface. Moreover, various advanced graphic interfaces for PC or for embedded control systems can be supplied on request, able to quickly allow the introduction of new ready-for-use devices on the market.

The Generator, design for resistive loads in its standard version, is available in different configurations for reactive loads (typical of some electromedical applications) and can operate in continuous mode and in different pulsed modes, with both frequency and duty cycle easily configurable by the user.

LEANGEN-480k-50-M provides instantaneous measurement of RF voltage and current – to allow real-time control of the power directed to the load and of the load impedance module – and of the operating temperature and generates alarms signalling configurable upon customer specifications.

Multifrequency operation and different output powers are available on request.

QUICK OVERVIEW

Compact, lightweight and top-reliable

32Vdc power supply

Internal air cooling

Tested with CW and Pulsed modes

480kHz operating frequency

Monopolar and bipolar applications

Floating output stage for BF applied parts applications

Neutral Element continuity check

Pilot tone for impedance monitoring

Internal dummy load for self-diagnosis

Real-time measurement of RF and DC parameters

Emergency shut down

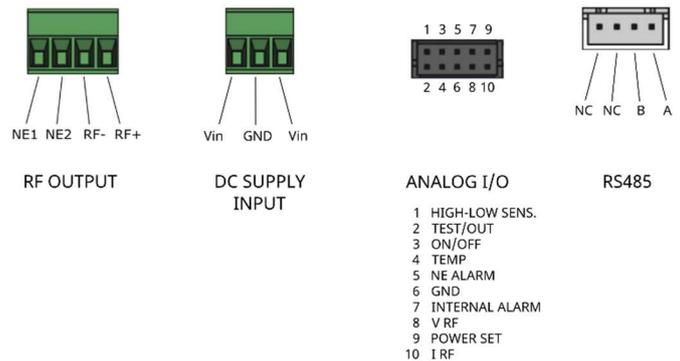
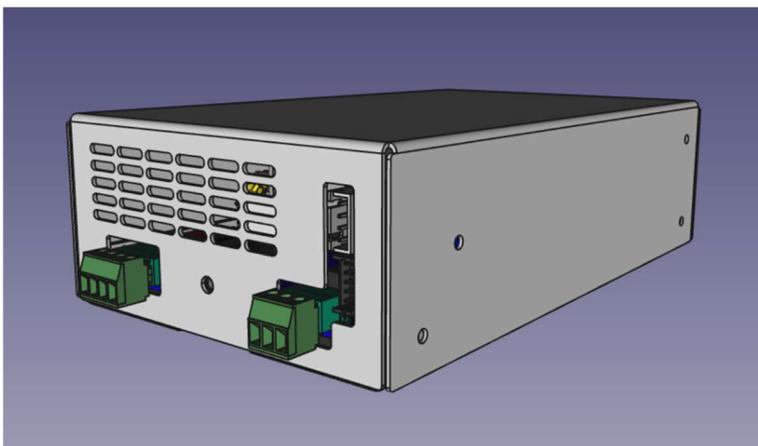
Digital and analogue control interfaces

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Technical Specifications

Output Power	0-50W CW on 100Ω resistive load
Frequency	480kHz ±1%
Operating Modes	CW and Pulsed modes
Output Stage	Switched by electromechanical relays, floating stage for BF applied parts
Neutral Element (NE) Output	2-terminal output with continuity control
DC Supply Voltage	32Vdc
DC Supply Current	Max 3.0A
RF Voltage	Max 110Vrms
RF Current	Max 1.2Arms
RF and DC parameters monitoring	Real-time
Control&Monitoring	RS485 and Analogue interfaces
Internal Dummy Load	Available for self-diagnosis applications
Emergency shut down	Triggered on RF overvoltage, RF overcurrent and overtemperature conditions
Cooling	Forced air, integrated (customizations available)
Size	178x108x51.4mm
Weight	800g



RF OUT Connector - Wurth code 691322310004

DC SUPPLY Connector - Wurth code 691322310003

Analog I/O Connector - Hirose code DF11-10DP-2DS

RS485 Connector - JST code S4B-XH-A