

PTL-2.5kW 902-928 MHZ SOLID-STATE HIGH-POWER MICROWAVE DESKTOP GENERATOR



Key Features/Benefits

- Generator is controlled with utilizing an easy to use, Windows™ based software package allowing control of:
 - Frequency (902-928 MHz)
 - Pulse and Average power settings
 - Plasma Start mode, more easily ignites plasma processes
 - High power frequency sweeping menu enabling electronic stirring within customer's applicator
 - Graphical display comparable to a vector network analyzer (VNA) showing best frequency selection based on load measurements.
- Built in Forward and Reflected power measurement when not using external high-power isolator
- Frequency and phase coherent capable between multiple generators
- Long Life, highly reliable construction
- High Power 7/16 DIN female coaxial output



Frequency Range

- 902-928 MHz
- Frequency Step Size: 100 kHz

Operating Modes

- Fixed, single frequency
- Internal Pulse Mode:

Min Pulse Repetition Rate	Max Pulse Repetition Rate	Min Duty Cycle	Max Duty Cycle
1 Hz	1,000 Hz (1 kHz)	10%	90%
1,001 Hz (1 kHz)	10,000 Hz (10 kHz)	10%	50%

Control System

- Windows-based interactive control software
- Required E-Stop loop connection
- PLC-type hardware control interface with 24VDC and 20ma current loop inputs and outputs
- Arc detection emergency stop inputs

Microwave Power Output

Model	Max Nominal Power
PTL-2.5CI-PREHD-0	2.5 kW

- Power set resolution input values: 1 watt
- Rugged LDMOS transistors
- Comprised of Qty 1, 2.5 kW modular power blades
- Integrated RF output timer
- Power measurement indicators: Forward & Reflected
- Maximum Reverse Power Handling: 600 W absolute



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Software Highlights

- Point-Click power and frequency setting across the band
- Forward/Reflected power and return loss indicators
- Best frequency selection based on load measurements
- Variable power over frequency sweep creation tool
- Programmable initial pulse for applications such as gas / plasma ignite

Power Supply

- AC mains: 220 VAC two-phase 50/60Hz
- 50-volt switch mode power supply
- Air Cooled

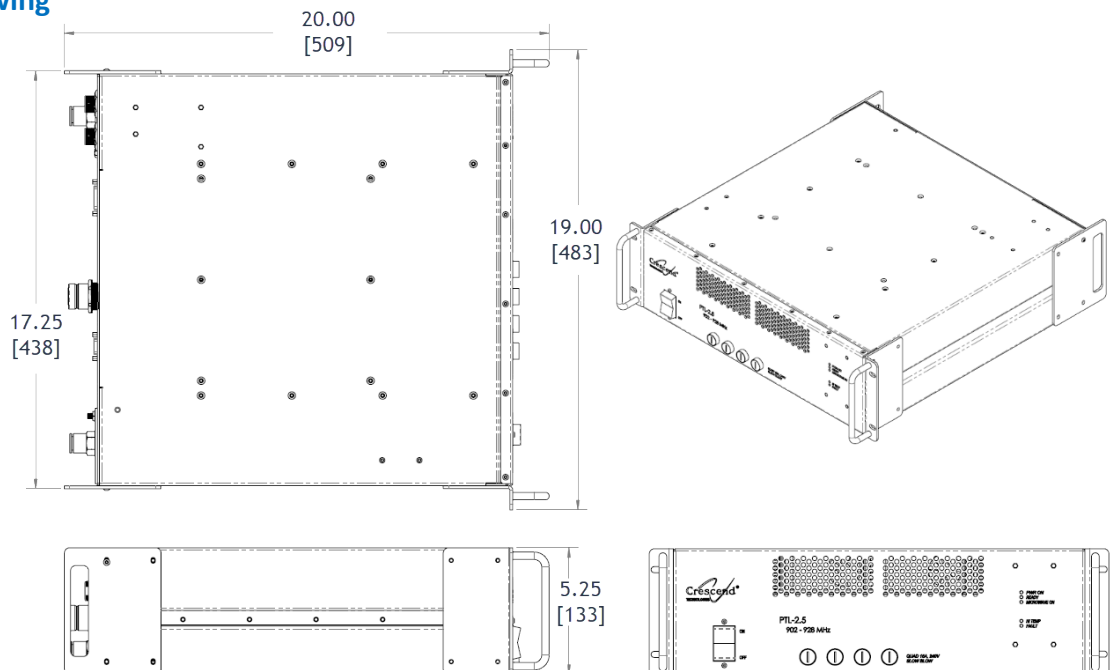
Dimensions and Weight

- 6 in (15.24 cm) High x 18.5 in (46.99 cm) Deep x 18 in (45.72cm) Wide
- Weight: 37 lb (16.8 kg)

Facility Requirements

- Input Water Flow Min: 2.5 GPM (9.5 LPM)
- Input Water Temperature: 15°C - 20°C
- Environmentally Controlled:
 - Ambient Room: 15°C - 25°C
 - Relative Humidity: < 95%
 - Conditions must be non-condensing
- Water Hook Up: SS water quick connects 75 PSI rated (5.2 bar) 1/2" OD nylon tubing
- Heat Load: ~10K BTU/hr @ Full Power

Mechanical Drawing



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