SG 624

Solid State Microwave Generator

550 Watts @ 2450 MHz

The SG 624 is a water cooled, solid state, rack-mountable, microwave generator with adjustable power up to 550 W with a frequency range of 2400 - 2500 MHz and uses the latest power amplifier technology resulting in excellent operational efficiency.

The SG 624 features exceptional control functionality, including precise power and frequency control, making it ideal for science and research applications. This state-of-the-art microwave generator uses the most powerful high frequency transistors, enabling a breakthrough performance in modern microwave heating technology, providing a stable output frequency that can be tuned if needed.

The unit has been designed as a stand alone microwave generator and can be controlled via manual commands using the front panel interface or remotely through standardized PLC control signals. A USB interface is provided on the rear panel to allow upgrading of internal firmware or monitoring/ controlling the microwave power supply from a standard Windows®-based PC. The microwave output power interface uses a standard coax 7/16" socket. It includes built-in circulator and passive load to withstand 100% reverse power condition, and offers compensated monitor signals of the forward and reverse power. It is powered by 230 V line, while operation is controlled by an external command at +24 VDC (ON/OFF) and by a 0 -1 0 V signal to adjust the forward power.

Product Features

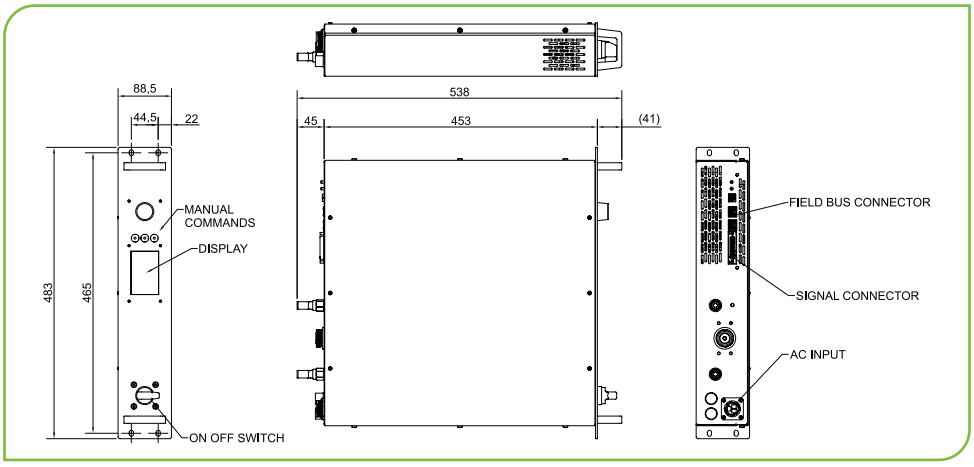
- Smaller form factor with solid state design
- Coax output connector
- Capable of frequency tuning the output between 2400 - 2500 MHz
- 19" rack-mountable unit for easy integration
- Remote and manual operation for easy setup, operation and troubleshooting

Key Benefits

- Advanced high-frequency transistor design for precise power control and stability
- Rugged, reliable design ensures optimum power to the process
- Withstands up to 100% reverse power conditions for optimum reliability

Specifications

Output Power (with internal circulator)		550 W max, calibrated all over frequency range
Frequency, Nominal		2450 MHz
Frequency Range, Adjustable		2400 - 2500 MHz
P.A. Efficiency (excluding isolator)		≥ 50%
Coax Output Connector		7/16" female
Input Power Range		200 - 260 V, 50/60 Hz
Dimensions	**Height, Front Panel** **Width, Front Panel** **Width, Rack** **Length, Rack**	• 88.5 mm (3.48") • 483 mm (19.02") • 443 mm (17.44") • 453 mm (17.83")
Weight		20 kg/44 lbs
Cooling Type		Water cooled
Working Ambient Temperature (max)		35°C/95°F
Minimum - Maximum Inlet Water Temperature		20°C - 30°C
Minimum Inlet Water Flow		2 l/min
Maximum Inlet Water Pressure		3 bar
Front Panel		• Rotary 0-1 switch • LCD graphic display showing the main info to the user • 3 Button keyboard and a rotating knob to scroll, select and adjust the various parameters
Rear Panel		• 3 pin socket for main line supply • 25 pin D type connector for signals • USB port • 7/16" coax output connector • Fieldbus interface with a connector depending on type of bus (for version with Bus)
Versions		• Display (Version 2) that includes the functionality described above • Bus (Version 1) that may carry an Ethernet-like fieldbus, Modbus® TCP/IP, Profinet, etc.
Accessories		Coax dual directional coupler, passive load, RF cable, and coax to waveguide transition are available to complete the installation.
Compliance		Low Voltage Directive 2014/35/UE, EMC Directive 2014/30/UE and the following norms: EN 61010-1: 2011-3, EN61000-6-4: 2007-11, EN61000-6-2: 2006-10, EN61000-4-3: 2007-04, EN61000-4-6: 2006-10



Dimensional Drawing — Unless otherwise specified, dimensions are nominal values in millimeters.

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