

SOLID STATE MICROWAVE GENERATOR

200 W 2450 MHz

Ref. GMS200WSM56MPFCFMS1IRVFAIT C



SAIREM's GMS solid state generators provide continuous wave (CW) output power adjustable from 0 to 200 W at frequencies ranging between 2400 MHz and 2500 MHz.

This generator is designed for scientific and industrial applications, to be used with one or multiple MW applicators, to assure high reliability and small footprint. The protection against high reflected power and measurement of reflected power are performed via a built-in isolator.

In comparison with magnetron generators, the main advantages of the solid state generator are:

- Very good (narrow and stable) frequency spectrum even at low power;
- True RMS detector with linear measurement of reflected and forward power;
- No tube (magnetron) and no high voltage inside the generator (longer life time and safer);
- Possibility to adjust the frequency.

TECHNICAL SPECIFICATIONS

REF	GMS200WSM56MPFCFMS1IRVFAIT C
Presentation	Power supply with N connector output
Frequency	Central frequency at 2450 MHz. Adjustable between 2400 and 2500 MHz
Frequency resolution	Frequency adjustable with 100 kHz step
Output power	0 to 200 W (adjustable with 1 W step) $\pm 2 \%$
Forward and reflected power measurement	Coupler with true RMS detector – linear measurement
Ripple	< 0.2 % RMS
Reflected power	Adjustable from 1 W to 100 W Possibility to control on reflected power limit
Protection functions	VSWR (built-in isolator with automatic power reduction), excess temperature (overheating interlock)
Microwave output	Coaxial cable N-type female plug, 50 Ohm
Control	Local: front panel Remote: Modbus RTU RS232 (standard version) or RS485 or Ethernet, ProfiBus, CanOpen. <u>to be specified when ordering</u> Analogue input set point for forward power control, analogue output for forward and reflected power
Mains	1 phase, 110V to 230V +/-10% VAC, 50/60 Hz
Consumption	690 VA max.at 200 W
Weight	11.8 kg
Cooling	Air
Security	A safety connector ensures safety standard for machines and personnel

CONTROL AND OPERATION OF MICROWAVE GENERATORS WITH DIGITAL DISPLAY

The generator with digital front panel is wholly operated in local mode from the control panel located at the front of the power supply rack.

The front panel consists of a large white over blue graphical LCD screen 240 x 128 pixels, 3 push buttons and a knob for menu navigation and power control.



All operating parameters and control status, as well as any possible fault, forward power and reflected power are displayed on the screen. The forward power set-point is pre-displayed before starting.

