



18 kW, 915 MHz MICROWAVE GENERATOR REF. GLP180KSM56T400ME2IRG3

The GLP180KSM56T400AP3IR is a continuous wave microwave generator consisting of a switch mode HV power supply and a magnetron head installed in a single cabinet. The measurement of the reflected power is done using either an isolator (if ordered) or a bi-directional coupler. A PLC drives simultaneously the magnetron anodic power, electromagnet current and filament voltage. The result is a very low power setting possibility (2 kW), maximum efficiency, reduced ripple and increased magnetron life time.

SAIREM's built-in Automatic Restart Function (ARF) avoids the total shutdown of the generator during a process if accidentally the magnetron switches off. All operational parameters and faults are available on the touch screen colour digital HMI. The position of the HMI can be changed depending of the customer's requirement.



Figure: 915 MHz, 18 kW continuous wave generator single cabinet, represented with isolator)

REF	GLP180KSM56T400ME2IRG3
Presentation	Switch mode power supply ($\eta > 90$). Electromagnet's supply consists of a switch mode system with current regulation. Filament supply enables soft start, voltage regulation and anti-moding function
Frequency	915 MHz \pm 10 MHz or 896 MHz \pm 10 MHz (to be specified); central frequency is imposed by the magnetron
Output power	Adjustable from 2 to 18 kW
Power stability & ripple	Stability better than 1 % between 2 kW and 18 kW, ripple \pm 2 % at full output power
Ripple	Better than 2 % between 2 and 18 kW
Rise and fall times (KIP)	10 ms in standard KSM (Continuous wave) version; 1 to 3 ms if KIP (continuous wave and controlled pulse) version
HMI Display	7.5" colour touch screen digital display, all controls & functions accessible, PRO-FACE PLC, fault history... Position of display cabinet adjustable (top side on the picture).
Operating mode	Continuous wave (KSM), pulse (KIP version), plasma starting, ramp, timer, ARF system
Maximum SWR	Integrated isolator, SWR = ∞ any phase, and thermal limitation at 15 kW RP (reflected power) by forward power limitation or stop by fault (to be chosen from menu)
Remote control	Analogue, Profibus, CanOpen, or Modbus RS485
Safety interlock	Safety relay, emergency stop...
Mains	380/415 V, 50 Hz or 60 Hz, 3 phase + earth
Consumption	28 kVA at full power
Microwave output	WR975, flange CPR 975
Weight	530 kg
Cooling	By water, temperature between 18 °C and 23 °C, 35 L/min at max. 15 kW reflected power.

