



35 kW, 915 MHz MICROWAVE GENERATOR REF. GLP350KSM56T400ME2IR1C

The GLP350KSM56T400ME2IR1C 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 (3 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, 35 kW continuous wave generator
(single cabinet) – represented with isolator*

REF	GLP350KSM56T400ME2IR1C
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 system, ARF (Automatic Restart 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 3 to 35 kW
Power stability & ripple	Stability better than 1 % between 3 kW and 35 kW, ripple \pm 2 % at full output power, even with a unstable mains.
Ripple	Better than 2 % between 2 and 35 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 function.
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	44 kVA at full power
Microwave output	WR975, flange CPR 975
Weight	550 kg, (comprising isolator 140 kg)
Cooling	By water, temperature between 18 °C and 23 °C, 45 L/min and 4 bar, for max. 15 kW reflected power. Power capacity: 30 kW maximum.

