

GS Series

Industrial Microwave Generators 2450 MHz



MKS Alter® GS Series Microwave Generators are built on experience and designed with rugged and reliable switch mode power supplies for demanding industrial applications. The GS Series offers compact generators up to 15 kW in a 19 inch standard rack with a remote head and dedicated cables set.

For power up to 3 kW the isolator is integrated in the microwave head. For 6, 10 and 15 kW microwave generators, an external isolator is included. All MKS Alter microwave generators are equipped with reflected power detection.

Product Features

- Large choice of input line voltage
- Power output range of 200 W - 15 kW
- Configurable remote control: RS232, PLC, Fieldbus interface
- WR340 waveguide microwave connection up to 10kW
- WR430 waveguide microwave connection for 15kW



Key Benefits

- Reliable and cost-effective
- Plug and Play design
- Extremely compact and light weight
- Precise parameter control

Specifications

Model	GS02020	GS03020 - GS03040
Power Output	200 - 2000 W	300 - 3000 W
Frequency	2450 MHz	2450 MHz
Power Regulation	10 - 100%	10 - 100%
Line Load Regulation	1%	1%
Ripple	Max $\pm 3\%$ of output power	Max $\pm 3\%$ of output power
Ambient Temperature	Up to 40°C maximum	Up to 40°C maximum
Isolator	Integrated	Integrated
Microwave Connections	WR340 waveguide with PDR26 flange	WR340 waveguide with PDR26 flange
Remote Control Options	PLC, RS232, ANYBUS	PLC, RS232, ANYBUS
AC Power Input	230 VAC $\pm 10\%$, 50/60 Hz	3 x 208 V, 50/60 Hz; 3 x 400 V, 50/60 Hz
Compliance	CE	CE
Power Supply	SM 845	SM 1250
Dimensions	88 mm (H) x 483 mm (W) x 420 mm (D)	130 mm (H) x 447 mm (W) x 420 mm (D)
Cooling	Forced air, approx 100 m ³ /h	Forced air, approx 120 m ³ /h
		
Power Head	TI020	TI030
Dimensions	280 mm (H) x 162 mm (W) x 229 mm (D)	280 mm (H) x 162 mm (W) x 229 mm (D)
Cooling	1 L/min, max 5 bar (inlet temp: 20-30°C)	2 L/min, max 5 bar (inlet temp: 20-30°C)
		
Part Number Examples	90GS02020/MKS02	90GS03020/MKS00 90GS03040/MKS02

GS06520 - GS06540 - GS06548	GS10040 - GS10048	GS15040 - GS15048
600 - 6000 W	1 - 10 kW	1 - 15 kW
2450 MHz	2450 MHz	2450 MHz
10 - 100%	10 - 100%	10 - 100%
3%	3%	3%
Max $\pm 5\%$ of output power	Max $\pm 5\%$ of output power	Max $\pm 5\%$ of output power
Up to 40°C maximum	Up to 40°C maximum	Up to 40°C maximum
External	External	External
WR340 waveguide with PDR26 flange	WR340 waveguide with PDR26 flange	WR430 waveguide with PDR22 flange
PLC, RS232, ANYBUS, Display	PLC, RS232, ANYBUS	PLC, RS232, ANYBUS, Display
3 x 208 V; 3 x 400 V; 3 x 480 V, 50/60 Hz	3 x 400 V, 50/60 Hz; 3 x 480 V, 50/60 Hz	3 x 400 V, 50/60 Hz; 3 x 480 V, 50/60 Hz
CE	CE	CE
SM 1280	SM 1690	MPS 24 Option (integrated in cabinet)
310 mm (H) x 444 mm (W) x 482 mm (D)	310 mm (H) x 444 mm (W) x 482 mm (D)	1500 mm (H) x 600 mm (W) x 800 mm (D)
Forced air, approx 200 m ³ /h	Forced air, approx 200 m ³ /h	Forced air, approx 800 m ³ /h; water cooled, 2 L/min
		
TMH66 (water cooled)	TM100 (water cooled)	TM150
375 mm (H) x 235 mm (W) x 225 mm (D)	375 mm (H) x 235 mm (W) x 225 mm (D)	280 mm (H) x 162 mm (W) x 229 mm (D)
4 L/min, max 5 bar (inlet temp: 20-30°C)	7 L/min, max 5 bar (inlet temp: 20-30°C)	20 L/min, max 5 bar (inlet temp: 20-30°C)
		
90GS06540/MKS03B2 90GS06540/MKS51MTCPB2 90GS06620/MKS00	90GS10040/MKS03B2 90GS10040/MKS05MTCPB2	Part number list for a 15 kw composed by: 90MPS24T/MKS15MTCP 90TM150/MKS1 441384229/5

