

2.7-3.1GHz/1000Watts/Rack Mount

Model Number: MCWNP2900M60A

ELECTRICAL SPECIFICATIONS @ 220VAC, 25 ° C, 50 μ S, 10%,50Q System

Parameter	Symbol	Minimum	Typical	Maximum	Units
Operating Frequency	BW	2700		3100	MHz
RF Output Power	PPK	800	1000		Watt
Duty Cycle	Duty Cycle		10		%
Pulse Width	PWIDTH		100		μS
PRI	PRI		1000		μS
Harmonics @ Pout = 1000W	H		-20		dBc
Spurious Signals	Spur		-55		dBc
RF Input Power @ Pout =1000W	PIN		0		dBm
Input Return Loss	S11		-10		dB
Rise /Fall time (Pulse Performance)	TRISE/FALL/OFF (10-90)		200		nS
PA Switch On/Off@10-90% Time	TON/OFF		2		uS
RF Switch On/Off@10-90% Time	TON/OFF		200		nS
Power droop@ PW=10μS, DC=10%	Droop		1		dB
In/Output Impedance	Impedance		50		Ω
Operating Voltage (1-phase)	VDC		50V		Volt
DC Current @1000W: Duty Cycle 10%	IDD		3		Amp
PA Efficiency			40%		

MECHANICAL SPECIFICATIONS

Parameter	Value	Limits
Dimensions	240x120x25 [9.45x4.72x0.98]	mm [inch]
Weight	2.5 [5.5]	kg [lbs]
RF Connectors Input	SMA, Female	
RF Connectors Output	Typ-N, Female	
DC Interface Connector	Hybrid,D-sub 7 Pin, Male	
Cooling	External Heatsink (Not Supplied)	

ENVIRONMENTAL CHARACTERISTICS (Design to Meet)

Parameter	Minimum	Typical	Maximum	Units	Notes
Operating Ambient Temperature	-10		40	°C	
Storage Temperature	-20		45	°C	
Relative Humidity (non-condensing)			95	%	

PROTECTIONS

Input RF drive level without	+5 dBm (Max)
VSWR protection@250W	@ 3:1- PA output power will degrade to a safe operation level, and system will still work. @ >3:1 protection will make system shutdown.
Thermal Overload	Power will Gracefully Degrade, when Ambient Temp >40 °C

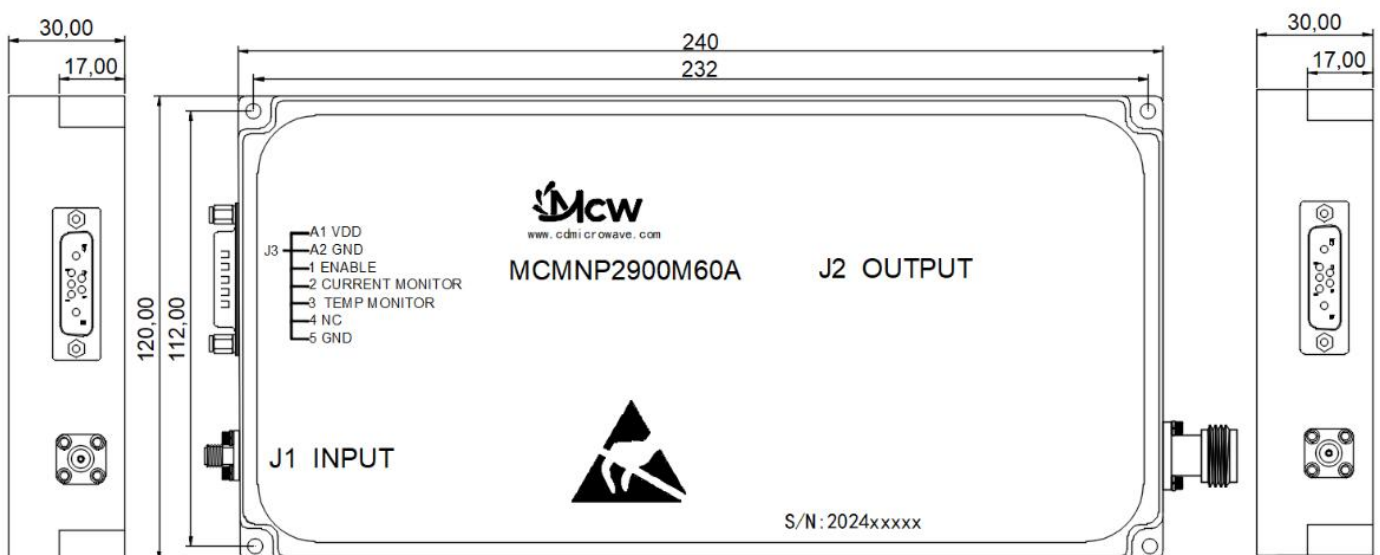
2.7-3.1GHz/1000Watts/Rack Mount

Model Number: MCWNP2900M60A

DC INTERFACE CONNECTOR

Pin #	Description	Specifications
A1	VDD	28V _{dc}
A2	GND	Ground
1	ENABLE	PA Switch Amplifier Enable: TTL Logic High (3.3V) (Internally Pulled- Low)
2	CURRENT SENSE	Analog voltage relative to I _{bb} @ 100 mV per Ampere
3	TEMP SENSE	Analog voltage relative to Module's Temperature @ 10 mV/°C
4	RF Switch	RF signal
5	GND	Ground

OUTLINE DRAWING (All dimensions in mm)



TYPICAL PERFORMANCE PLOTS

