

Wideband RF Power Amplifier Module CRF-PA-20M1000M-100W	Frequency Range 20 – 1,000 MHz	Connector Input: N-Female Output: N-Female
	Rated Output Power 100 W	Package Size 250 × 120 × 30 mm

Electrical Characteristics

Test conditions: 50Ω system, unless otherwise specified.

Parameter	Min	Typ	Max	Units
Frequency Range		20 – 1,000 MHz		
Gain	50			dB
Gain Flatness	-4		4	dB
Adjustable Gain		20		dB
Input VSWR			1.6 : 1	
Input power			0	dBm
Rated Output Power	100			W
Power Supply		DC 36V		
Harmonics			-10	dBc
Spurious			-60	dBc
RF Connectors In/Out		Input: N-Female Output: N-Female		
Control Interface		RS485		
Dimensions		250 × 120 × 30		mm
Impedance		50		Ω
Operating Temperature	0		50	°C
Cooling Method		External heatsink with forced-air cooling		
Application		Test & measurement / communication / interference / aviation control		
Built-in protection		over-voltage, over-temperature, over-drive and VSWR. Design based on advanced GaN technology.		

DC Connector & Pin Definitions

Interface / Pin	Description	Specification / Level
Ground Terminal	Ground	Ground Return
2W2 Connector Pin 1	Power Supply (VCC)	+28V to 40V DC (Nominal: +36V)
2W2 Connector Pin 2	Power Ground	GND
DB9 Pin 1	Serial Communication	RS485 (-)
DB9 Pin 2	Serial Communication	RS485 (+)
DB9 Pin 3	PTT (PA Control)	PA ON: 3.3V PA OFF: 0V
DB9 Pin 4	Attenuation Adjustment	Input range: 0 – 3.0V (DC) 0.5V = Min Attenuation 3.0V = Max Attenuation
DB9 Pin 5	Input Monitor	Input detection voltage output
DB9 Pin 6	Forward Power Monitor	Forward detection voltage output
DB9 Pin 7	Reverse Power Monitor	Reverse detection voltage output
DB9 Pin 8	Temperature Monitor	Temperature detection voltage output
DB9 Pin 9	Ground	GND

Model CRF-PA-20M1000M-100W	Package Size 250 × 120 × 30 mm	Gain 50dB
Connector Reference RF IN: N-Female RF OUT: N-Female Control: RS485	Power / Cooling Supply: 36 VDC Cooling: External heatsink with forced-air cooling	Release Note Mechanical drawing is provided for installation reference. Final dimensions are subject to the production unit.

Applications Test & measurement / communication / interference / aviation control	Customization Optional built-in coupler is available.
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Compliance / Quality Framework

RoHS Compliant	CE / FCC	ISO 9001	GJB 9001C
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Test data and pattern files can be supplied for project review where applicable.

Mechanical Outline

Complete outline drawing shown below for clear integration reference.

