

Wideband RF Power Amplifier CRF-PA-6000M18000M-100W	Frequency Range 6,000 – 18,000 MHz Rated Output Power 100 W	Connector Input: SMA-Female Output: N-Female Package Size 400 × 200 × 80 mm
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Electrical Characteristics

Test conditions: 50Ω system, unless otherwise specified.

Parameter	Min	Typ	Max	Units
Frequency Range		6,000 – 18,000 MHz		
Gain	50			dB
Gain Flatness	-5		5	dB
Input VSWR			2 : 1	
Input power			0	dBm
Rated Output Power	100			W
Power Supply		DC 28V		
Harmonics			-10	dBc
Spurious			-60	dBc
RF Connectors In/Out		Input: SMA-Female Output: N-Female		
Control Interface		RS485		
Dimensions		400 × 200 × 80		mm
Impedance		50		Ω
Operating Temperature	0		50	°C
Storage Temperature	-20		75	°C
Cooling Method		Air cooling		
Noise Floor			-35	dBm/MHz
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
4-Pin Aviation (Pin 1, 2)	Power Supply (VCC)	+24V to 32V DC (Nominal: +28V)
4-Pin Aviation (Pin 3, 4)	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-6000M18000M-100W	Package Size 400 × 200 × 80 mm	Gain 50dB
Connector Reference RF IN: SMA-Female RF OUT: N-Female Control: RS485	Power / Cooling Supply: 28 VDC Cooling: 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 forward/reverse power monitoring, input power detection and GPIB control interface are 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.