Wideband RF Power Amplifier

CRF-PA-6000M8000M-80W

Frequency Range
6,000 – 8,000 MHz

Rated Output Power
80 W

Connector
Input: N-Female
Output: N-Female

Package Size
446 × 336 × 100 mm

Electrical Characteristics

Test conditions: 50Ω system, unless otherwise specified.

Parameter	Min	Typ	Max	Units
Frequency Range		6,000 – 8,000 MHz		
Gain	49			dB
Gain Flatness	-3		3	dB
Input VSWR			2 : 1	
Input power			0	dBm
Rated Output Power	80			W
Power Supply		DC 28V		
Harmonics			-10	dBc
Spurious			-60	dBc
RF Connectors In/Out		Input: N-Female Output: N-Female		
Control Interface		RS485		
Dimensions		446 × 336 × 100 mm		
Impedance		50		Ω
Operating Temperature	0		50	℃
Storage Temperature	-20		75	℃
Cooling Method		Air cooling		
Noise Floor			-40	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-6000M8000M-80W	**Package Size** 446 × 336 × 100 mm	**Gain** 49dB
Connector Reference RF IN: N-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.**

Compliance / Quality Framework

RoHS Compliant	CE / FCC	ISO 9001	GJB 9001C

Test data and pattern files can be supplied for project review where applicable.

Mechanical Outline

Complete outline drawing shown below for clear integration reference.