Advanced Test Equipment Corp.
Rentals • Sales • Calibration • Service

AA-4050G-4
SOLID STATE HIGH POWER AMPLIFIER

FEATURES

Designed for broadband EMI/RFI, Lab, and IEC Testing applications
Small form factor, rack mounted system
Class A/AB Linear design
High power advanced technology devices
Designed for Band-V CW & Pulse power applications
Built-in protection circuits, with extensive monitoring
Local LCD & remote flexible interfaces
High efficiency, with unprecedented reliability and ruggedness

ELECTRICAL SPECIFICATIONS: 50Ω, 25°C

Parameter	Specification	Notes
Operating Frequency Range	40.0 - 50.0 GHz	
Power Output @ Psat	4 Watts Min	CW or Pulse
Power Gain	36 dB Min	0dBm or less for rated Pout
Power Gain Flatness	6.0 dB p-p Typ	Constant input power
Input Return Loss	-10 dB Max	
2-Tone Intermodulation (IMD)	-30 dBc Typ	26dBm/Tone, Δ = 1MHz
Harmonics	-20 dBc Max	At rated Pout
Spurious	-60 dBc Max	Non-harmonics
Operating Voltage	100 - 240 VAC Nom	50/60Hz
Power Consumption	600 Watt Max	
Input Power Protection	+3 dBm Max[1]	
Load VSWR Protection	4 : 1: Max[2]	Foldback @ preset limit
Sample Port Coupling (optional)	-40 dB	Optional - 2.4mm-F

1 Units with optional digital monitor and control, for basic units <10 Sec without damage
2 Units with optional digital monitor and control, for basic units <1 minute at rated Pout

ENVIRONMENTAL CHARACTERISTICS

Parameter	Specification	Notes
Operating Ambient Temperature	0 to +50 °C	
Storage Temperature	-40 to +85 °C	
Relative Humidity	up to 95 %	Non-condensing
Altitude	3000m	
Shock & Vibration	Normal transport[3]	

3 MIL Spec available for quotation

MECHANICAL SPECIFICATIONS

Parameter	Specification	Notes
Dimensions W x H x D	430 x 133 x 560 mm/19 x 5.25 x 22 in.	3U
Weight	20 Kg. Nom	
RF Connectors In / Out / Sample Port	2.4 mm/WR22 (2.4mm Opt. Sample)	RF Output (Rear panel is Standard)
AC Power / Interface Connector	IEC 60320-C14 / 9-Pin D-Sub	Or equivalent
Cooling	Built in Fan Cooling	Variable speed
OPTIONAL: Digital Monitor & Control (DMC) FWD, REV, VSWR, GAIN, ALC, V & I, TEMP, Optional Safety Interlock (INT)	Ethernet RJ-45 TCP/IP, RS422/485, USB Optional GPIB Interface Open=STBY/Short=RFON	 IEEE rear panel BNC-F rear panel

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AVAILABLE SPECIAL OPTIONS

Parameter	Specification	Notes
Input Doubler: RF Input Frequency Range	20.0 - 25.0 GHz	Option RID: (quoted separate)
RF connection location	Front Panel	Option FP: (No charge)
Option FRS: Forward RF Sample	-60dB, Type N-Female	Front or rear panel
Option RRS: Reflected RF Sample	-50dB, Type N-Female	Front or rear panel
Option GPIB: GPIB remote control	GPIB IEEE-488 Remote capability	
Included CPM: Calibrated Power Monitoring (With purchase of Option DMC)	Offset correction entry for +/- 0.2dB accuracy	11-points standard[4]

4 Consult with factory if additional points would be required