

AMP4025P-1

SOLID STATE HIGH POWER PULSE AMPLIFIER

FEATURES

Designed for EMI/RFI, lab, HIRF, radar, TWT driver, high power pulse applications
or EMI/RFI, lab, Pulse and all communication applications
Small form factor, rack mounted system
Class AB Linear high power advanced technology design
Suitable for S-Band high power linear pulse 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	2.7 - 3.1 GHz				
Power Output @ Peak Pulse	1000 Watt Min				
Power Gain	60 dB Min			0dBm or less for rated Pout	
Power Gain Flatness	2.0 dB p-p Max			Constant input power	
Pulse Characteristics	Width	Duty	PRF	Rise/Fall	Droop
	up to 100 μS	10 % Max	Up to 10.0 KHz	<100 nS	<1 dB
Input Return Loss	-14 dB Max				
Output Power On/Off Ratio	-80 dB Max			TTL Gate Control	
Pulse to Pulse Amplitude stability	0.1 dB Typ				
Spurious	-60 dBc Max			Non-harmonic	
Harmonics	<-30 dBc Typ			At rated output power	
Operating Voltage	100 - 240 VAC			47 - 63 Hz	
Power Consumption	450 Watt Avg. Max			@ 10% Duty cycle	
Input Power Protection	+10 dBm Max ¹				
Load VSWR Protection	4 : 1: Max ²			Foldback @ preset limit	
Sample Port (optional)	-60 dB			N-Female	

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	5 to 95 %	Non-condensing
Altitude	3000 meters	
Shock & Vibration	Normal transport ³	

3 MIL Spec available for quotation

MECHANICAL SPECIFICATIONS

Parameter	Specification	Notes
Dimensions W x H x D	482 x 133 x 560 mm	3U - excluding handles
Weight	20 Kg. Max	
RF Connectors In/Out/Sample	Type-N Female	Front or rear panel
Gate Control	BNC Female	Front panel
AC Power / Control 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
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	5-points standard ⁴

⁴ Consult with factory if additional points would be required.

OUTLINE DRAWING

SHOWN WITH OPTIONAL LCD DIGITAL CONTROLLER

