

AMP20005 SOLID STATE HIGH POWER AMPLIFIER

FEATURES

Designed for EMI/RFI, lab, CW/Pulse and all communication applications
 Small form factor, rack mounted system
 Class A/AB linear design
 High power advanced technology devices
 Instantaneous wide bandwidth
 Built-in protection circuits, forward RF Sample port
 High reliability and ruggedness with extensive monitoring
 Remote-control platforms included
 High efficiency, with unprecedented reliability and ruggedness
 LEGACY PN: AMP2145B-LC



ELECTRICAL SPECIFICATIONS : 50Ω, 25C

Parameter	Specification		Notes
Operating Frequency Range	18.0 - 40.0 GHz		
Power Output @ Psat	18 - 34GHz	25Watt Min	CW or Pulse, Note 4
	34 - 40GHz	20Watt min	
Power Gain	44 dB Min		0dBm or less for Rated Power
Power Gain Flatness	4.0 dB p-p Max		Constant input power
Gain Adjustment Range	20 dB Typ		Local or remote capable
Input Return Loss	-10 dB Max		
2-Tone Intermodulation (IMD)	-30 dBc Typ		34dBm/Tone, Δ = 1MHz
Harmonics	-20 dBc Max		At rated output power
Spurious	-60 dBc Max		Non-harmonics
Operating Voltage	100 - 240 VAC		47 - 63Hz
Power Consumption	800 Watt Max		At rated Pout
Input Power Protection	+10 dBm Max ¹		
Load VSWR Protection	4 : 1: Max ² (100% protection)		Foldback @ preset limit
Sample Port Coupling (optional)	-40 dB Nom		2.92 mm K-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	up to 95 %	Non-condensing
Altitude	3000 meters	
Shock & Vibration	Normal transport ³	

³ MIL Spec available for quotation

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MECHANICAL SPECIFICATIONS

Parameter	Specification	Notes
Dimensions W x H x D	430 x 133 x 750 mm	3U, excluding handles
Weight	24 kg	
RF Connectors In / Out / Sample Port	2.92 mm-F / WRD180 / 2.92mm-F	Front or rear panel
AC Power / Interface Connector	IEC 60320-C14 / 9-Pin D-Sub	Or equivalent (rear panel)
Cooling: Built in Quiet-Cool	Close circuit Air-liquid cooling	
STANDARD: Digital Monitor & Control ⁴ FWD, REV, VSWR, GAIN, ALC, V & I, TEMP, OPTIONAL: Safety Interlock	Ethernet RJ-45 TCP/IP, RS422/485, USB Open=STBY/Short=RFON	BNC Female on rear panel
OPTIONAL: Digital Monitor & Control (DMC ⁴) 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

⁴ Option DMC - LCD Controller option may reduce output power by 0.5 dB typical. Please consult the factory for more information.

AVAILABLE SPECIAL OPTIONS

Parameter	Specification	Notes
Option FRS: Forward RF Sample	-40dB, Type K-Female	Front or rear panel
Option RRS: Reflected RF Sample	-40dB, Type K-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	12-points standard ⁵

⁵ Consult the factory if additional points are required.

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OUTLINE DRAWING SHOWN WITH LDC DIGITAL CONTROLLER

