

AMP2103P-LC SOLID STATE HIGH POWER AMPLIFIER

FEATURES

Designed for EMI/RFI, lab, CW/Pulse and all communication applications
Automotive Pulse Radar testing, EMC, EW and all industry standards
Small form factor, rack mounted system
Class A/AB Linear design
High power advanced technology devices
Instantaneous wide bandwidth
Built-in protection circuits, with extensive monitoring
Local LCD & remote flexible interfaces
High efficiency, with unprecedented reliability and ruggedness



ELECTRICAL SPECIFICATIONS: 25°C, 50Ω

Parameter	Specification			Notes	
Operating Frequency Range	0.8 - 3.2 GHz				
Power Output @ Peak Pulse	1000 Watt Typ			Pulse	
Pulse Characteristics	Width	Duty	PRF	Droop/O-shoot	RF Rise/Fall
	up to 560 μs	up to 10 %	up to 10 kHz	1 dB Typ ³	50 ns Typ
Power Output CW	500 Watt Min			CW	
Power Gain	60 dB Min			0dBm or less for rated Pout	
Gain Adjustment Range	20 dB Min			Local or remote	
Power Gain Flatness	4.0 dB p-p Max			Constant input power	
Input Return Loss	-10 dB Max				
2-Tone Intermodulation (IMD)	<-30 dBc Typ			47dBm/Tone, Δ = 1MHz	
Harmonics	<-20 dBc Typ			At rated output power	
Spurious	-60 dBc Max			Non-harmonics	
Output Power On/Off Ratio	-80 dB Typ			TTL Gate Control	
Operating Voltage	220 VAC Nom, 1-Phase			Option: 120/208 VAC, 3-Phase	
Power Consumption CW / Pulse	5500 / 2500 Watts Max			At rated Pout	
Input Power Protection	+10 dBm Max ¹				
Load VSWR Protection	4 : 1: Max ²			Foldback @ preset limit	
Sample Port Coupling (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

3 Droop <1dB Typ @100usec, overshoot & droop >1dB Typ @ 560μsec

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 ⁴	

4 MIL Spec available for quotation

MECHANICAL SPECIFICATIONS

Parameter	Specification	Notes
Dimensions W x H x D	482 x 398 x 750 mm	9U, excluding handles
Weight	60 Kg. Typ	
RF Connectors Input/Output/Sample	N-Female / 716 DIN / N-Female	Front or rear panel
Gate Control	BNC Female	Front panel
Interface Connector	9-Pin D-Sub	Rear panel
AC Power	IEC 60320-C14	Or equivalent
Cooling: Built in Quiet-Cool	Close circuit Air-liquid cooling	
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

e

AMP2103P-LC SOLID STATE HIGH POWER AMPLIFIER

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	7-points standard ⁵

⁵ Consult with factory if additional points would be required

OUTLINE DRAWING SHOWN WITH LCD DIGITAL CONTROLLER

