

MODEL NUMBER:
SSDB1G-250/300

SOLID STATE HIGH POWER AMPLIFIER



FEATURES

- Designed for EMI/RFI, lab, and general communication applications
- Small form factor, rack mounted system
- Class A/AB linear design using high power advanced devices
- Instantaneous ultra-wide bandwidth
- Suitable for all signal channel modulation applications
- Built-in protection circuits with extensive monitoring
- Optional all remote-control platforms
- High efficiency, with unprecedented reliability and ruggedness

ELECTRICAL SPECIFICATIONS: 50 Ω, 25°C

PARAMETER	SPECIFICATION			NOTES
	A	B	C	
Band				
Operating Frequency Range	10kHz-250MHz	100-500MHz	0.5-2.0GHz	Band switching @ 15 mS Typ
Power Output @ Psat	250 Watt Min			CW or Pulse
Power Output @P1dB	150 Watt Typ			
Power Gain	54 dB Min			0dBm or less for rated Pout
Gain Adjustment Range	>20 dB Min			Local or remote capable
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			44dBm/Tone, Δ = 1MHz
Harmonics	-20 dBc Typ			At rated output power
Spurious	-60 dBc Max			Non-harmonics
Operating Voltage	200 - 240 VAC			47 - 63 Hz
Power Consumption	2000 Watt Max			At rated Pout
Input Power Protection	+10 dBm Max ¹			
Load VSWR Protection	4 : 1 Max ²			Foldback @ preset limit ²
Sample Port Coupling (optional)	-50 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	up 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	430 x 444 x 580 mm	10U - Excluding handles
Weight	47 kg.	
RF Connectors In / Out/Sample	Type-N Female	Front or rear panel
AC Power / Interface	IEC 60320-C14 / 9-Pin D-Sub	Or equivalent
Cooling: Built in Quiet-Cool	Close circuit Air-liquid cooling	65 dBa Typ
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

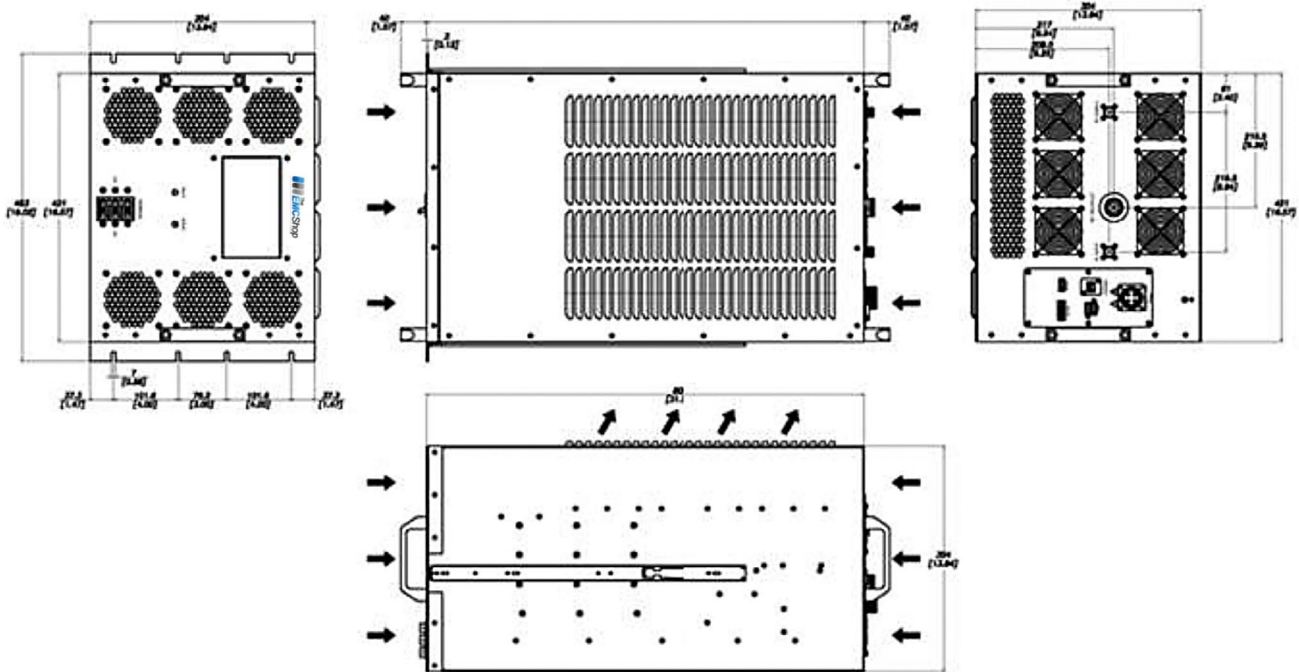
AVAILABLE SPECIAL OPTIONS

PARAMETER	SPECIFICATION	NOTES
Option RI: Rack Cabinet Integration	Cabinet Height specified at time of order	Option RI: (quoted separate)
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	15-points standard ⁴

4 Consult with factory if additional points would be required

OUTLINE DRAWING

SHOWN WITH LCD DIGITAL CONTROLLER



SHOWN WITH OPTIONAL RACK CABINET

- 1. Rack : SR14UBDP
- 14U Rack
- 2. Blanking Panel
- 3. UNIT : mm / [inch]

