

AA-2640G-200 SOLID STATE HIGH POWER AMPLIFIER

FEATURES

Designed for EMI/RFI, lab, CW/Pulse and all EW communication applications
 Small form factor, rack mounted system
 Class A/AB Linear design
 High Power Advanced technology devices
 Instantaneous ultra-wide bandwidth
 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	26.5 - 40.0 GHz	
Power Output @ Psat	200 Watt Min/250 Watt Typ	CW or Pulse
Power Output @ P1dB	140 Watt Typ	
Power Gain	53 dB Min	0dBm or less for rated Pout
Power Gain Flatness	4.0 dB p-p Typ	Constant input power
Gain Adjustment Range	20 dB Min	Local or remote capable
Input / Output Return Loss	-10 dB Max	
2-Tone Intermodulation (IMD)	-30 dBc Typ	43dBm/Tone, Δ = 1MHz
Harmonics	-20 dBc Max	At rated output power
Spurious	-60 dBc Max	Non-harmonics
Operating Voltage	230/380 VAC, 3 ph	
Power Consumption	8000 Watt Max	At rated Pout
Input Power Protection	+5 dBm Max ¹	
Load VSWR Protection	4 : 1: Max ²	Foldback @ preset limit
Sample Port (optional)	-50 dB	2.9mm 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

MECHANICAL SPECIFICATIONS

Parameter	Specification	Notes
Dimensions W x H x D	483 x 532 x 800 mm	12U, excluding connectors
Weight	45 Kg. Typ	
RF Conn. In / Out / Sample (optional)	(2.92) K-Female / WR28 / (2.92) K-Female	Rear 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	7" LCD IEEE rear panel BNC-F rear panel

e

AVAILABLE SPECIAL OPTIONS

Parameter	Specification	Notes
Option FRS: Forward RF Sample	-50dB, 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	15-points standard ⁴

⁴ Consult with factory if additional points would be required.

CONTROLLER - PRIMARY (MAIN) SCREENS

<p>The screenshot shows a control interface with a top status bar (ONLINE, CLEAR, STANDBY), a central display for FWD POWER (4048.28), RFL POWER (18.69), and VSWR (1.01). Below this are buttons for VOLT_CURRENT and DUTY_TEMP, and a table of HPA parameters (VOLT, CURR, DRIVE CURR).</p>	<ul style="list-style-type: none"> a - Model: Amplifier model number b - STANDBY/ONLINE: Display STANDBY/ONLINE status c - CLEAR/FALUT: Display CLEAR/FAULT status d - STANDBY/ONLINE: Display STANDBY/ONLINE control e -STATUS: Displays fault & alarm monitors f - ALC: ALC menu button g - ETC: Screen selection button h - FWD POWER: Display FWD POWER value i - RFL POWER: Display RFL POWER value j - VSWR: Display VSWR value k - dBm/Watt: Display dBm/Watt selection & status L - dBm/Watt: Display dBm/Watt selection & status m - Volt_Current: Voltage & current monitor selection n - Duty_Temp: Pulse-Duty & temperature monitor selection o - Display status of the selected TABLE menu window
<p>The screenshot shows a control interface with a top status bar (ONLINE, CLEAR, STANDBY), a central display for FWD POWER (66.01), RFL POWER (18.67), and VSWR (1.01). Below this are buttons for OVER INPUT PWR, VSWR ALARM, OVER FWD PWR, VOLTAGE ALARM, OVER CURRENT, OVER TEMP, FAN FAULT, and BITERLOCK.</p>	<ul style="list-style-type: none"> a - Model: Amplifier model number b - STANDBY/ONLINE: Display STANDBY/ONLINE status c - CLEAR/FALUT: Display CLEAR/FAULT status d - STANDBY/ONLINE: Display STANDBY/ONLINE control e -STATUS: Displays fault & alarm monitors f - ALC: ALC menu button g - ETC: Screen selection button h - FWD POWER: Display FWD POWER value i - RFL POWER: Display RFL POWER value j - VSWR: Display VSWR value k - dBm/Watt: Display dBm/Watt selection & status L - dBm/Watt: Display dBm/Watt selection & status m - Display status of the fault & alarm status
<p>The screenshot shows a control interface with a top status bar (ONLINE, CLEAR, STANDBY), a central display for FWD POWER (66.18), RFL POWER (18.73), and VSWR (1.01). Below this are buttons for VOLT_CURRENT and DUTY_TEMP, and a table of pulse and temperature parameters (DUTY, PFM, PULSE WIDTH, TEMP. BYS, TEMP. HEAT, TEMP. HPA).</p>	<ul style="list-style-type: none"> a - Model: Amplifier model number b - STANDBY/ONLINE: Display STANDBY/ONLINE status c - CLEAR/FALUT: Display CLEAR/FAULT status d - STANDBY/ONLINE: Display STANDBY/ONLINE control e -STATUS: Displays fault & alarm monitors f - ALC: ALC menu button g - ETC: Screen selection button h - FWD POWER: Display FWD POWER value i - RFL POWER: Display RFL POWER value j - VSWR: Display VSWR value k - dBm/Watt: Display dBm/Watt selection & status L - dBm/Watt: Display dBm/Watt selection & status m - Volt_Current: Voltage & current monitor selection n - Duty_Temp: Pulse-Duty & temperature monitor selection⁶ o - Display status of the selected TABLE menu window

Note: item "n" for pulse amps only with Pulse parameter monitoring.