

## CBA80M1G-250E

### 80 MHz to 1 GHz 250 Watt Solid State Amplifier



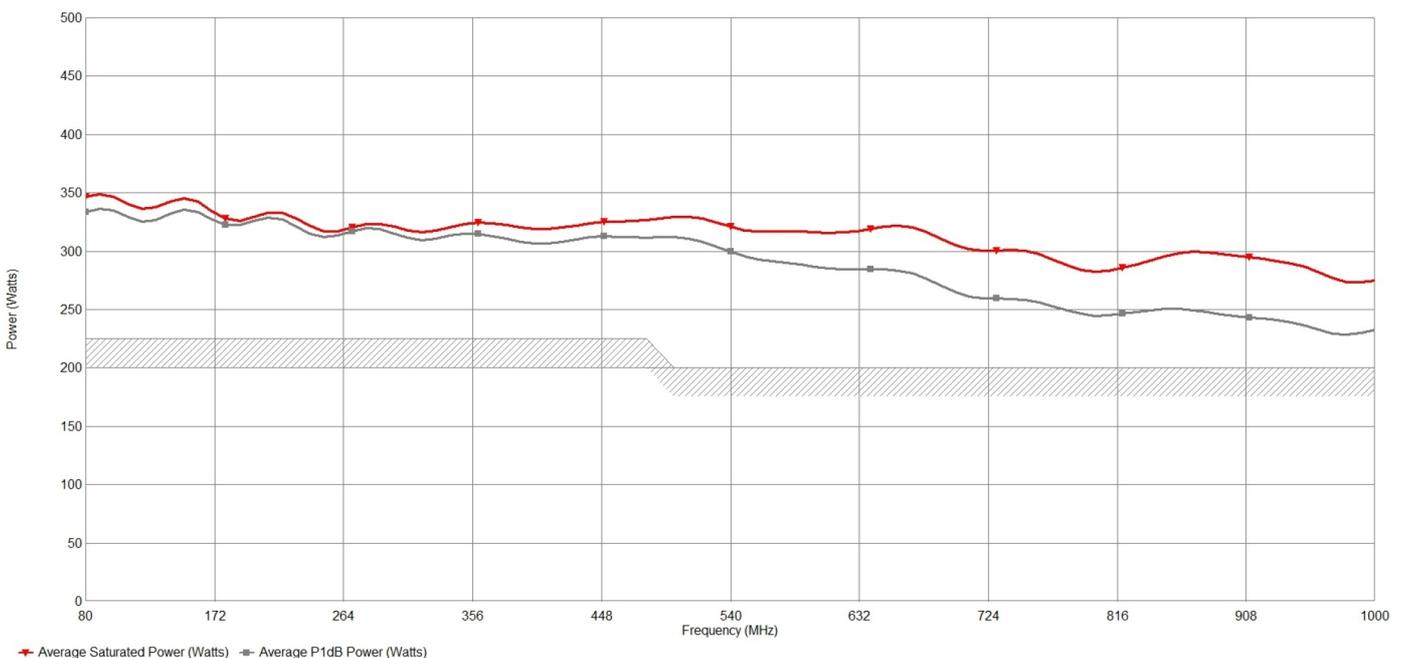
Our high-power density design supports a robust 250-watt Class A amplifier that operates over a wide 80 MHz to 1 GHz frequency range, all within a streamlined 4U enclosure. Capable of delivering a minimum of 200 watts of linear (P1dB) power, this amplifier is ideal for rigorous IEC, ISO, and MIL radiated immunity compliance testing. Seamlessly integrable with Teseq RF immunity test system equipment such as the NSG 4070D, NSG 6000, and Teseq GTEM cells, this amplifier complements turnkey test setups with ease.

#### MAIN FEATURES

- **Class A Operation**
- **Touch Screen Display**
- **100% Mismatch Tolerant**
- **Scalable Modular Construction**
- **Ethernet, USB, GPIB, RS-232 Remote Interface**
- **3 Year Warranty**
- **Applications: Radiated immunity (ISO, IEC, MIL), Telecom Component Test and Aerospace & Defence**

A responsive colour touchscreen provides real-time feedback on the operation status of the amplifier and access to diagnostic information. The amplifier design is fully VSRW protected and can function into an open or short circuit condition with no need for gain foldback. Thermally optimized for efficiency, the design reduces thermal stress on critical component and decreases fan noise for a quieter testing environment.

Multiple standard remote interfaces, including USB, GPIB, RS232, and Ethernet, provide flexible connectivity. Amplifier gain can be controlled remotely via these interfaces or directly through the intuitive front-panel touchscreen, offering convenience and adaptability in diverse testing environments.



■ Average Saturated Power (Watts) ■ Average P1dB Power (Watts)

### Technical Specifications

Frequency Range	80 MHz to 1 GHz
Rated Output Power	250W (min) - 300W (typ)
Power Output @ 1dB Compression	80-500MHz - 225W (min) - 250W (typ)
Power Output @ 1dB Compression	500-1000MHz - 200W (min)
Input for Rated Output	0dBm (1mW)
Small Signal Gain	54 dB
Gain Variation (max) ±	2.0 dB
Gain Control Adjust When Below P1dB	20 dB
Harmonics @ P1dB (min)	-20 dBc
Spurious (typ)	-70 dBc
Input VSWR	1.5:1 (max)
Output VSWR	2:1 (typ)
Output Impedance	50 Ohm
3rd Order Intercept Point	58 dB
Noise Figure (typ)	8 dBm
Modulation Formats	AM, FM, PM, ODFM
Maximum Input Power (no damage)	13 dBm
Output VSWR Tolerance	Infinite any Phase (No Foldback)

### General Specifications

Acoustic Noise (measured @ 1 m)	60 dBA
Supply Frequency	47 to 63 (Hz)
Supply Voltage	100 to 240 VAC
Supply Power (max)	1 KVA

### Mechanical Specifications

RF Input Connector	Type-N Female
RF Output Connector	Type-N Female
Safety Interlock	15-Pin Subminiature D Female
Dimensions (No Cabinet) (W x H x D)	(4U) 48.3 x 17.7 x 74.9 cm (19.0 x 7.0 x 29.5 in)
Weight (No Cabinet)	31.3 kg (69 lbs)
Cooling System	Air Cooled, Self-contained
Com. Interface	IEEE-488 / RS-232 / RS-232 (fibre optic) / USB 2.0 / Ethernet

### Environmental Specifications

Ambient Running Temperature	5°C to +40°C
Storage Temperature	-20°C to +50°C
Maximum Altitude	up to 2000M
Shock and Vibration	Normal Truck Transport

**Regulatory Compliance (CE)**

EMC	EN 61326-1
Safety	UL 61010-1
RoHS	DIRECTIVE 2011-65-EU
Export Classification	No Licence Required

**Available Configurations**

Product	Configuration	Item #
CBA80M1G-250E-001	Front Panel RF Connectors	3-342628
	Rear Panel RF Connectors	3-342629