

## CBA6G-050D

### 0.8 GHz to 6.0 GHz 50 Watt P1dB Class A Solid State Amplifier

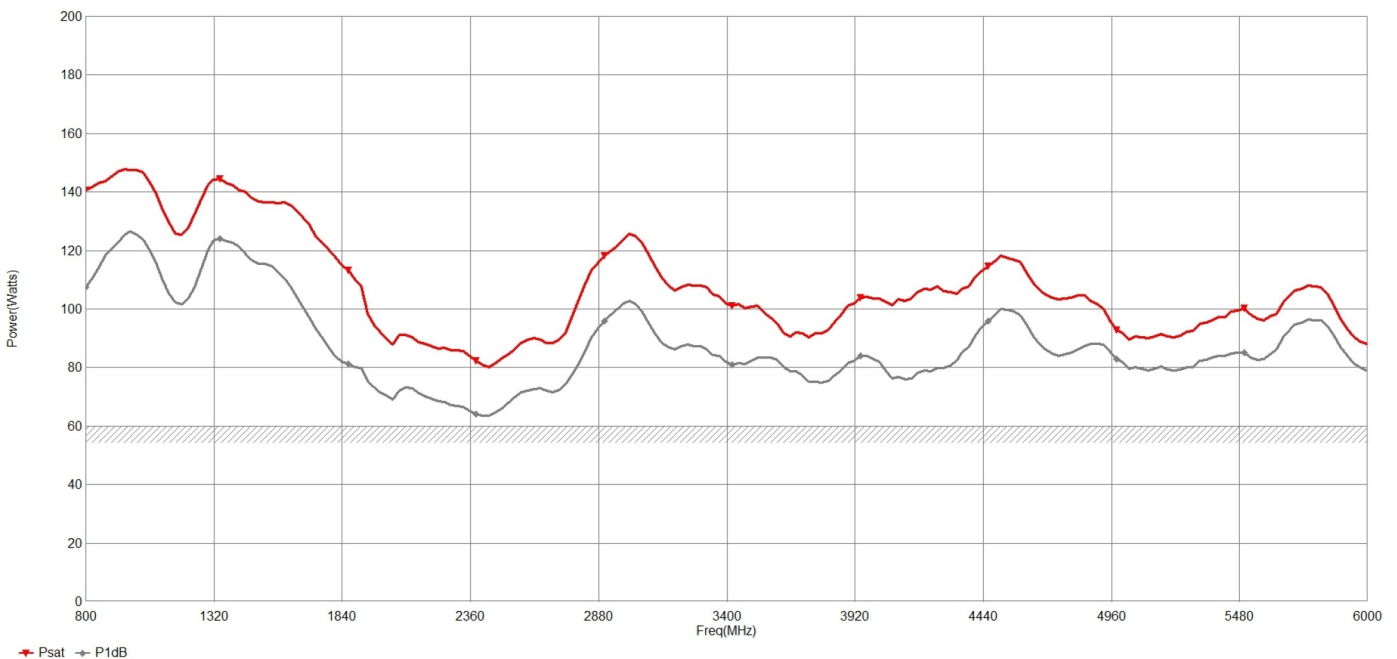


New class A, high power density, design has allowed us to produce a 50 watt, 0.8 GHz to 6 GHz amplifier in a compact 4U package. With a minimum of 50 watts of linear power this amplifier is ideal for RF immunity testing in a GTEM Cell or with a wide range of available horn antenna such as the Teseq BHA range. Readily integrated with the Teseq NSG 80 MHz to 6 GHz test system these amplifiers can form part of a broadband RF test system. The new touch screen colour display gives an immediate visual indication of forward and reverse power along with the current operating status of the amplifier and access to diagnostic information such as gate current and heatsink temperature.

#### MAIN FEATURES

- **Class A Operation**
- **100% Mismatch Tolerant with no Foldback**
- **Ethernet, USB, RS232 & GPIB Interface**
- **Built in Calibrated Directional Coupler**
- **3 Year Warranty**
- **Applications: Radiated immunity (ISO, IEC, MIL), Telecom Component Test and Aerospace&Defence**

Fan speed adjusts depending on the heatsink temperature thus ensuring the minimum audio noise level possible in the operating environment. The inbuilt calibrated forward power coupler provides a quick and easy way to monitor forward power with any power meter. Input overdrive protection prevents damage to the input devices due to accidental high input power. Multiple remote interfaces are available as standard including USB, GPIB, RS232, and Ethernet. Amplifier gain can be controlled either remotely through one of the available interfaces or via the front panel touch screen.



### Technical Specifications

Frequency Range	0.8 - 6.0 GHz
Rated Output Power	80W (min) - 90W (typ)
Power Output @ 1dB Compression	60W (min) - 70W (typ)
Input for Rated Output	1 dBm
Small Signal Gain	47 dB
Gain Variation (max) ±	+/- 3.0 dB
Gain Control Adjust When Below P1dB	30 dB
Harmonics @ P1dB (min)	0.8 GHz to 1.0 GHz -17 dBc / 1.0 GHz to 6.0 GHz -19 dBc
Spurious	-70 dBc
Input VSWR	2:1 (max)
Output VSWR	2:1 (typ)
Output Impedance	50 Ohm
3rd Order Intercept Point	58 dB
Noise Figure	12 dB
Modulation Formats	AM, FM, PM, OFDM
Maximum Input Power (no damage)	10 dBm
Output VSWR Tolerance	Infinite any phase (no foldback)
Stability	Unconditional

### General Specifications

Acoustic Noise (measured @ 1 M)	60 dBA
Supply Frequency	47 to 63 (Hz)
Supply Power (typ)	0.65 KVA
Supply Voltage	90 to 264 VAC

### Mechanical Specifications

RF Input Connector	Type-N Female
RF Output Connector	Type N Female
RF Sample Port Connectors	Type-N Female, (coupling factor 40 dB typical)
Safety Interlock	Via rear panel mounted BNC-female
Dimensions (No Cabinet) (W x H x D)	48.3 x 17.8 x 61.5 cm (19.0 x 7.0 x 24.2 in) (4U)
Weight (No Cabinet)	20 Kg (44 lbs)
Cooling System	Air Cooled, Self-contained
Com. Interface	GPIO, RS232, Ethernet & USB

### 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	3A001

**Available Configurations**

Product	Configuration	Item #
CBA6G-050D-001	Front Panel RF Connectors	3-342426
CBA6G-050D-002	Rear Panel RF Connectors	3-342427