

CBA6G-030D

0.8 GHz to 6.0 GHz 30 Watt P1dB Class A Solid State Amplifier



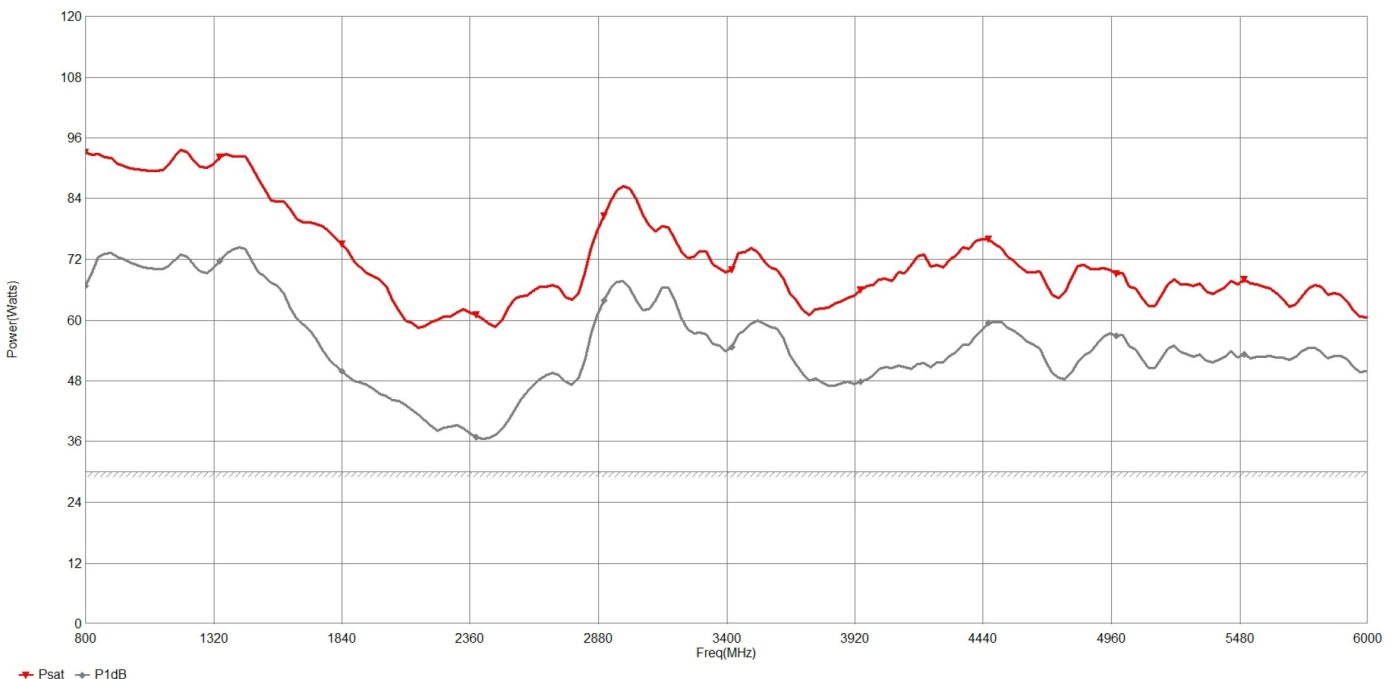
MAIN FEATURES

- **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**

New class A, high power density, design has allowed us to produce a 30 watt, 0.8 GHz to 6 GHz amplifier in a compact 4U package. With a minimum of 30 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 6000 80 MHz to 6 GHz test system these amplifiers can form part of a broadband RF test system.

The 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.

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.



→ Psat ← P1dB

Technical Specifications

Frequency Range	0.8 - 6.0 GHz
Rated Output Power	40W (min) - 50W (typ)
Power Output @ 1dB Compression	30W (min) - 40W (typ)
Input for Rated Output	1 dBm
Small Signal Gain	45 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	55 dB
Noise Figure	12 dB
Modulation Formats	AM, FM, PM, ODFM
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)	0.35 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)	15 kg (33 lbs)
Cooling System	Air Cooled, Self-contained
Com. Interface	GPIB, 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	No Licence Required

Available Configurations

Product	Configuration	Item #
CBA6G-030D-001	Front Panel RF Connectors	3-342424
CBA6G-030D-002	Rear Panel RF Connectors	3-342425