

CBA6G-100D

1.0 GHz to 6.0 GHz 100 Watt P1dB Class A Solid State Amplifier

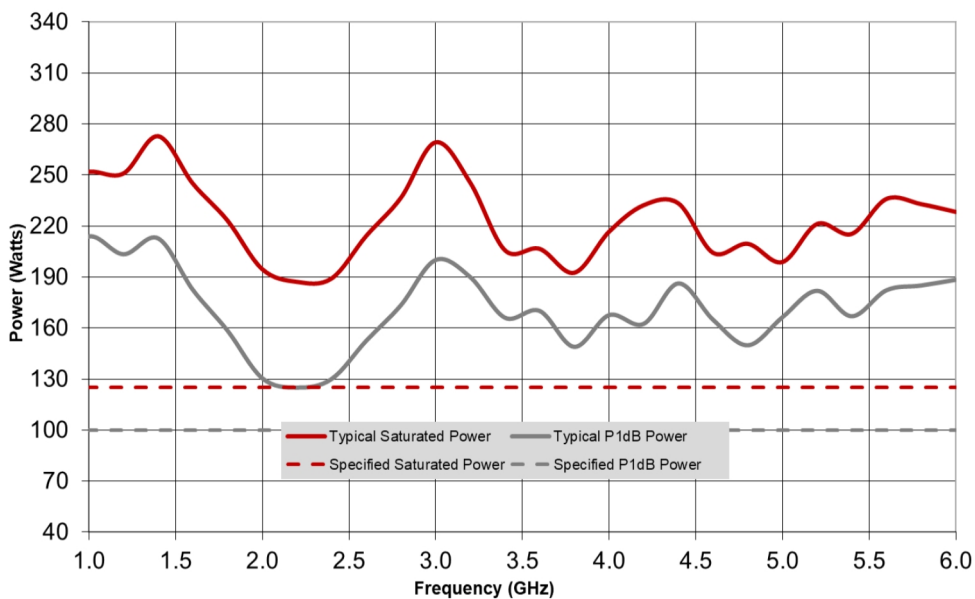


New class A, high power density, design has allowed us to produce a 100 watt, 1.0 GHz to 6 GHz amplifier in a compact 4U package. With a minimum of 100 watts of linear power this amplifier is ideal for RF immunity testing in a GTEM Cell or with a wide range of available horn antenna such as the Teseq 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 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

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 Bands	Single Band
Frequency (min.) GHz	1 GHz
Frequency (max.) GHz	6 GHz
Psat (min)	125 W
P1dB (min.)	100 W
Small Signal Gain	50 dB
Gain Variation (max) ±	+/- 3.0 dB
Harmonics @ P1dB (typ)	-18 dBc
Spurious (min.)	-70 dBc
3rd Order Intercept Point	10 dB > P1dB
RF Sample Port Coupling Factor (nom)	47 dB
Modulation Formats	AM, FM, Pulse
Maximum Input Power (no damage)	10 dBm
Gain Control	0-30 dB in 255 Steps
Output VSWR Tolerance	Infinite any phase (no foldback)
Stability	Unconditional
Output Impedance	50 Ohm
Input VSWR	2:1 (max)
Output VSWR	2:1 (typical)

General Specifications

Safety Interlock	Via rear panel mounted BNC-female
Supply Voltage	90 to 264 VAC
Supply Frequency	47 to 63
Supply Power (typ.)	1.5 kVA
RF Input Connector	Type N female
RF Output Connector	Type N female
RF Sample Port Connectors	Type N female
Com. Interface	GPIO, RS232, Ethernet & USB
Weight kg	28 kg
Dimensions	19 inch, 4U, 615mm (WxHxD)
Cooling System	Air Cooled, Self-contained

Available Variants

Product	Configuration	Item #
CBA6G-100D-001	Front Panel RF Connectors	3-342428
CBA6G-100D-002	Rear Panel RF Connectors	3-342429