

CBA6G-400D

1.0 GHz to 6.0 GHz 400 Watt P1dB Class A Solid State Amplifier

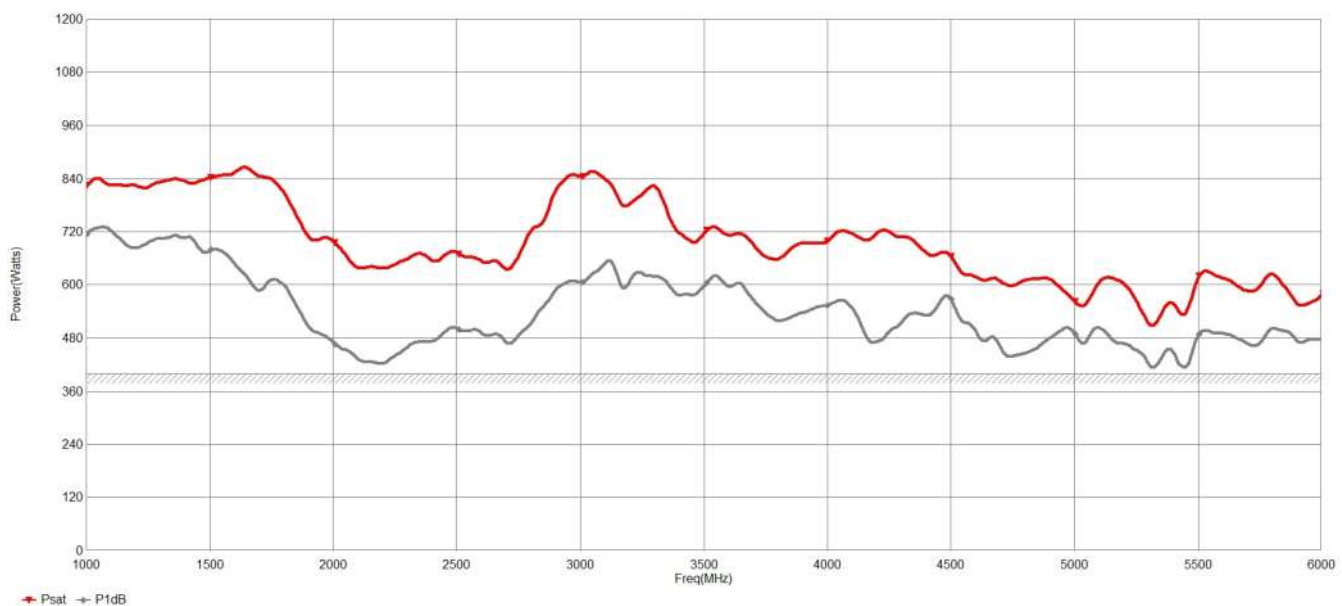


MAIN FEATURES

- Class A Operation
- 100% Mismatch Tolerant with no Foldback
- Ethernet, USB, RS232 & GPIB Interface
- Built in Calibrated Directional Coupler
- 3 Year Warranty

New class A, high power density, design has allowed us to produce a 400 watt, 1.0 GHz to 6 GHz amplifier in a compact 20U package. With a minimum of 200 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 test RF 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.

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)	500 W
P1dB (min.)	400 W
Small Signal Gain	56 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)	50 dB
Modulation Formats	AM, FM, PM, ODFM
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	See, "Available Variants" chart below
Supply Frequency	47 to 63
Supply Power (typ.)	5.5 kVA
RF Input Connector	Type N female
RF Output Connector	Type 7/16 female
RF Sample Port Connectors	Type N female
Com. Interface	GPIO, RS232, Ethernet & USB
Weight kg	160 kg
Dimensions (WxHxD)	See, "Available Variants" chart below
Cooling System	Air Cooled, Self-contained

Available Variants

Product	Configuration	Item #
CBA6G-400D-001	Front Panel RF Connectors, 1 Phase 180 to 265 VAC x 2 (19 inch, 16U Rack)	3-342432
CBA6G-400D-002	Rear Panel RF Connectors, 1 Phase 180 to 265 VAC x 2 (19 inch, 16U Rack)	3-342433
CBA6G-400D-003	Front Panel RF Connectors, 3 Phase STAR, 5 Wire, 380 to 415 VAC Line to Line + N + E (19 inch, 20U Rack)	3-342434
CBA6G-400D-004	Rear Panel RF Connectors, 3 Phase STAR, 5 Wire, 380 to 415 VAC Line to Line + N + E (19 inch, 20U Rack)	3-342435
CBA6G-400D-005	Front Panel RF Connectors, 3 Phase DELTA, 4 Wire, 208 to 240 VAC Line to Line + E (19 inch, 20U Rack)	3-342436
CBA6G-400D-006	Rear Panel RF Connectors, 3 Phase DELTA, 4 Wire, 208 to 240 VAC Line to Line + E (19 inch, 20U Rack)	3-342437