

CBA20M6G-030-030D

20 MHz - 6.0 GHz 30 Watt P1dB Dual Band Solid State Amplifier



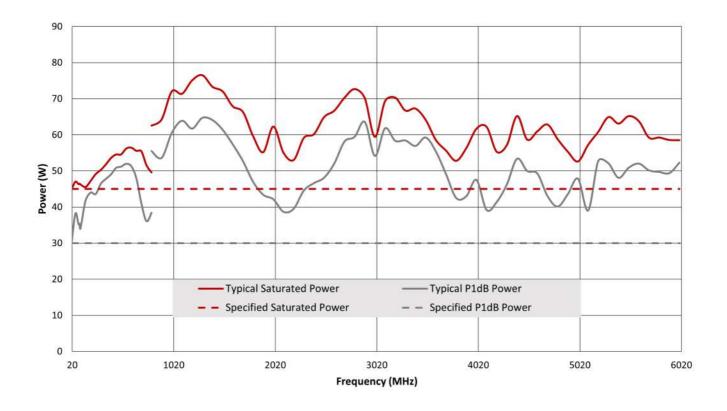


MAIN FEATURES

- 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 dual -band 30 watt P1dB, 20 MHz to 6 GHz solid-state amplifier in a compact 4U package. With a minimum of 30 watts of P1dB power this amplifier is not only ideal for RF immunity tests to standards such as ISO11452-9 but also many 5G infrastructure component tests. The touch screen colour display gives an immediate visual indication of the operating status of the amplifier and access to diagnostic information such as gate current and heatsink temperature.

The fan speed adjusts depending on the heatsink temperature thus ensuring the minimum audio noise level possible in the operating environment. The calibrated dual directional coupler provides a quick and easy way to monitor forward and reflected 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.





RF Specifications

Frequency Bands	Dual Band
Frequency (min.) MHz	20 MHz
Frequency (max.) GHz	6 GHz
Modulation Formats	AM, FM, PM, ODFM
RF Sample Port Coupling Factor (nom)	47 dB
Maximum Input Power (no damage)	10 dBm
Output VSWR Tolerance	Infinite any phase (no foldback)
Stability	Unonditional
Output Impedance	50 Ohm
Input VSWR	2:1 (max)
Output VSWR	2:1 (typical)
Spurious (min.)	-70 dBc

Band 1

Frequency (min.) GHz Band 1 0.02 GHz Frequency (max.) GHz Band 1 0.8 GHz Psat (min.) Band 1 40 W PldB (min.) Band 1 30 W Gain (min.) Band 1 45 dB Gain Variation (max) Band 1 +/- 3.0 Harmonics @ PldB Band 1 (typ) -18 dBc 3rd Order Intercept Point Band 1 10 db > PldB Noise Figure Band 1 12 dB		
Psat (min.) Band 1 40 W P1dB (min.) Band 1 30 W Gain (min.) Band 1 45 dB Gain Variation (max) Band 1 +/- 3.0 Harmonics @ P1dB Band 1 (typ) -18 dBc 3rd Order Intercept Point Band 1 10 db > P1dB	Frequency (min.) GHz Band 1	0.02 GHz
P1dB (min.) Band 1 30 W Gain (min.) Band 1 45 dB Gain Variation (max) Band 1 +/- 3.0 Harmonics @ P1dB Band 1 (typ) -18 dBc 3rd Order Intercept Point Band 1 10 db > P1dB	Frequency (max.) GHz Band 1	0.8 GHz
Gain (min.) Band 1 Gain Variation (max) Band 1 Harmonics @ P1dB Band 1 (typ) 3rd Order Intercept Point Band 1 10 db > P1dB	Psat (min.) Band 1	40 W
Gain Variation (max) Band 1 +/- 3.0 Harmonics @ P1dB Band 1 (typ) -18 dBc 3rd Order Intercept Point Band 1 10 db > P1dB	P1dB (min.) Band 1	30 W
Harmonics @ P1dB Band 1 (typ) -18 dBc 3rd Order Intercept Point Band 1 10 db > P1dB	Gain (min.) Band 1	45 dB
3rd Order Intercept Point Band 1 10 db > P1dB	Gain Variation (max) Band 1	+/- 3.0
	Harmonics @ P1dB Band 1 (typ)	-18 dBc
Noise Figure Band 1 12 dB	3rd Order Intercept Point Band 1	10 db > P1dB
	Noise Figure Band 1	12 dB



Band 2

Frequency (min.) Band 2	0.8 GHz	
Frequency (max.) Band 2	6 GHz	
Psat (min.) Band 2	40 W	
P1dB (min.) Band 2	30 W	
Gain (min.) Band 2	45 dB	
Gain Variation (max) Band 2	+/- 3.0	
Harmonics @ P1dB Band 2 (typ)	-18 dBc	
3rd Order Intercept Point Band 2	10 db > P1dB	
Noise Figure Band 2	12 dB	

Mechanical Specifications

Safety Interlock	Via rear panel mounted BR2-female
Supply Voltage	90 to 264 VAC
Supply Frequency	47 to 63
Supply Power (typ.) Band 1	0.2 kVA
Supply Power (typ.) Band 2	0.35 kVA
RF Input Connector	Type N female
RF Output Connector	Type N female
RF Sample Port Connectors	Type N female
Com. Interface	GPIB, RS232, Ethernet & USB
Dimensions (WxHxD)	19 inch, 4U, 615mm Deep
Weight kg	18 kg
Cooling System	Air Cooled, Self-contained



Available Product Configurations

Product	Configuration	Item #
CBA20M6G-030-030D-001	Front Panel RF Connectors	3-342539
CBA20M6G-030-030D-002	Rear Panel RF Connectors	3-342540

