

CBA20M6G-030-030D

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

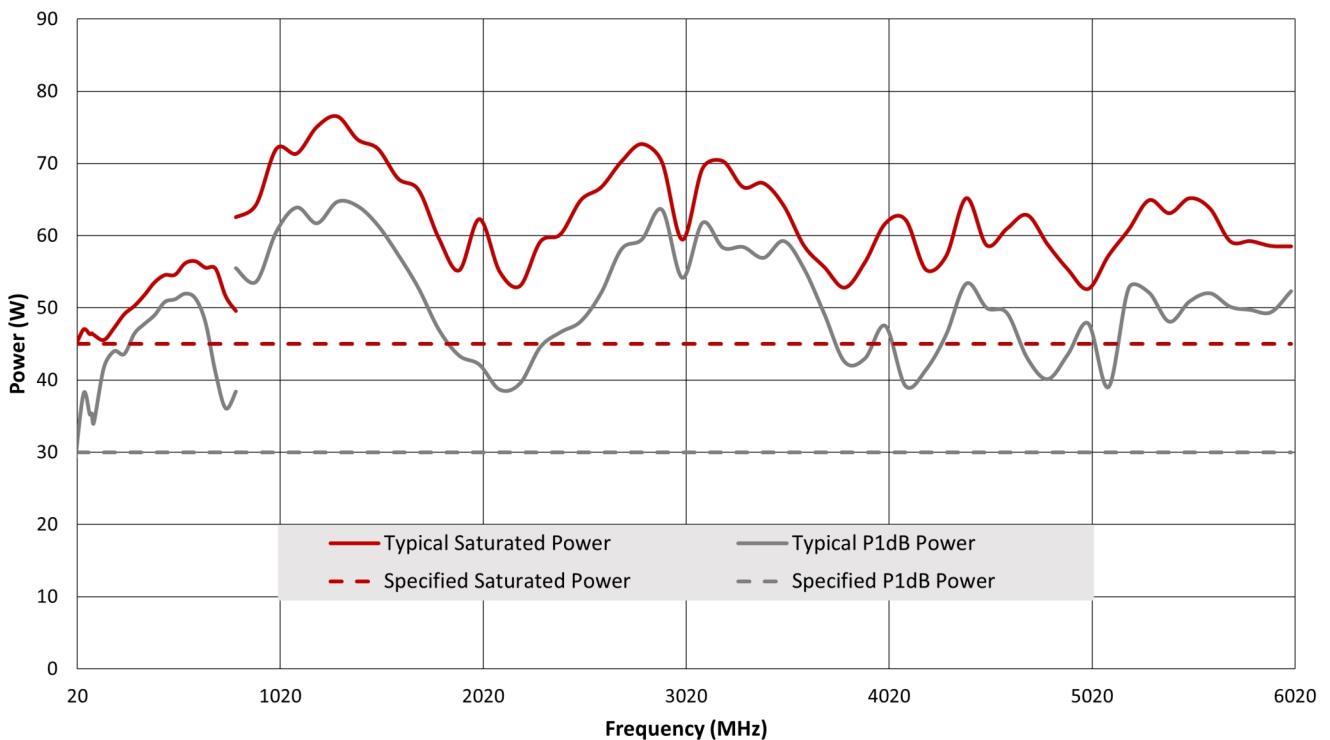


New class A, high power density, design has allowed us to produce a dual-band 30 watt P1dB, 20 MHz to 6 GHz solid-state amplifier in a compact 4U package. With a minimum of 30 watts of P1dB power this amplifier is not only ideal for RF immunity tests to standards such as ISO11452-9 but also many 5G infrastructure 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.

MAIN FEATURES

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

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, OFDM |
| RF Sample Port Coupling Factor (nom) | 47 dB |
| Maximum Input Power (no damage) | 10 dBm |
| Output VSWR Tolerance | Infinite any phase (no foldback) |
| Stability | Unconditional |
| 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 |
| 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 |
| 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 | 19 inch, 4U, 615mm Deep (WxHxD) |
| Weight kg | 18 kg |
| Cooling System | Air Cooled, Self-contained |

Available Product Configurations

| Product | Configuration | Item # |
|---------|---------------|--------|
|---------|---------------|--------|

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