

CBA 6G-900/600R

0.8 GHz to 6.0 GHz 900/600 Watt Automotive Radar Pulse Solid State Amplifier



A high-power density, design has allowed us to produce a 0.8 GHz to 6.0 GHz amplifier in a compact 20U Rack. With a minimum of 400/300 watts of linear power CW and 900/600 watts of saturated CW power over the frequency ranges of 1.2-1.4 GHz and 2.7-3.2 GHz. This amplifier is ideal for RF immunity testing and coupled with a wide range of available horn antenna makes this amplifier particularly suited for Radar Automotive Pulse Testing and can also be integrated with the Teseq NSG 6000 to form part of a broadband test system.

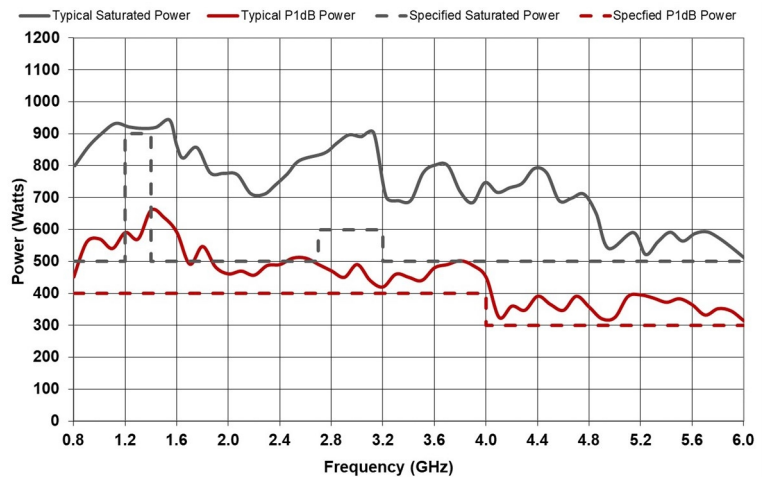
The touch screen color display gives an immediate visual indication of forward and reverse power along with the current operating status of the amplifier and access to diagnostic information such as gate current and heatsink temperature.

Fan speed adjusts depending on 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.

Multiple remote interfaces are available as standard including USB, GPIB, RS232, Ethernet.

MAIN FEATURES

- Class A Operation
- Intuitive user interface
- Input Overdrive Protection
- USB, Ethernet, GPIB and RS232 interface
- Built in Calibrated Directional Coupler
- 3 year warranty



RF Specifications

| | |
|---------------------------------|----------------------------------|
| Frequency Bands | Single Band |
| Frequency (min.) GHz | 0.8 GHz |
| Frequency (max.) GHz | 6 GHz |
| Psat (min) | 500 W |
| P1dB (min) | 400/300 W |
| Gain @Rated Output Power | 57 dB |
| Harmonics @ P1dB | -18 dBc |
| 3rd Order Intercept Point | 10 db > P1dB |
| 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) |
| Spurious (min.) | -70 dBc |
| Spurious | -80 dBc |

Radar Tune 1

| | |
|------------------------------|---------|
| Radar Tune 1 Frequency (min) | 1.2 GHz |
| Radar Tune 1 Frequency (max) | 1.4 GHz |
| Radar Tuned 1 Psat (min) | 900 W |
| Radar Tune 1 Harmonic Level | -18 dBc |

Radar Tune 2

| | |
|------------------------------|---------|
| Radar Tune 2 Frequency (min) | 2.7 GHz |
| Radar Tune 2 Frequency (max) | 3.1 GHz |
| Radard Tuned 2 Psat (min) | 600 W |
| Radar Tune 2 Harmonic Level | -18 dBc |

Mechanical Specifications

| | |
|---------------------|--------------------------------------|
| Safety Interlock | Via rear panel mounted BR2-female |
| Supply Frequency | 47 to 63 Hz |
| RF Input Connector | Type N female |
| RF Output Connector | 7/16 (f) |
| Com. Interface | GPIO, RS232, Ethernet & USB |
| Dimensions mm | 19 inch, 20U Rack 800mm Deep (HxWxD) |
| Weight kg | 160 kg |

Available Product Configurations

| Product | Configuration | Item # |
|--------------------|---------------------------|--------------------|
| CBA 6G-900/600R | Front Panel RF Connectors | CBA 6G-900/600R |
| CBA 6G-900/600R-10 | Rear Panel RF Connector | CBA 6G-900/600R-10 |