

CBA6G-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.

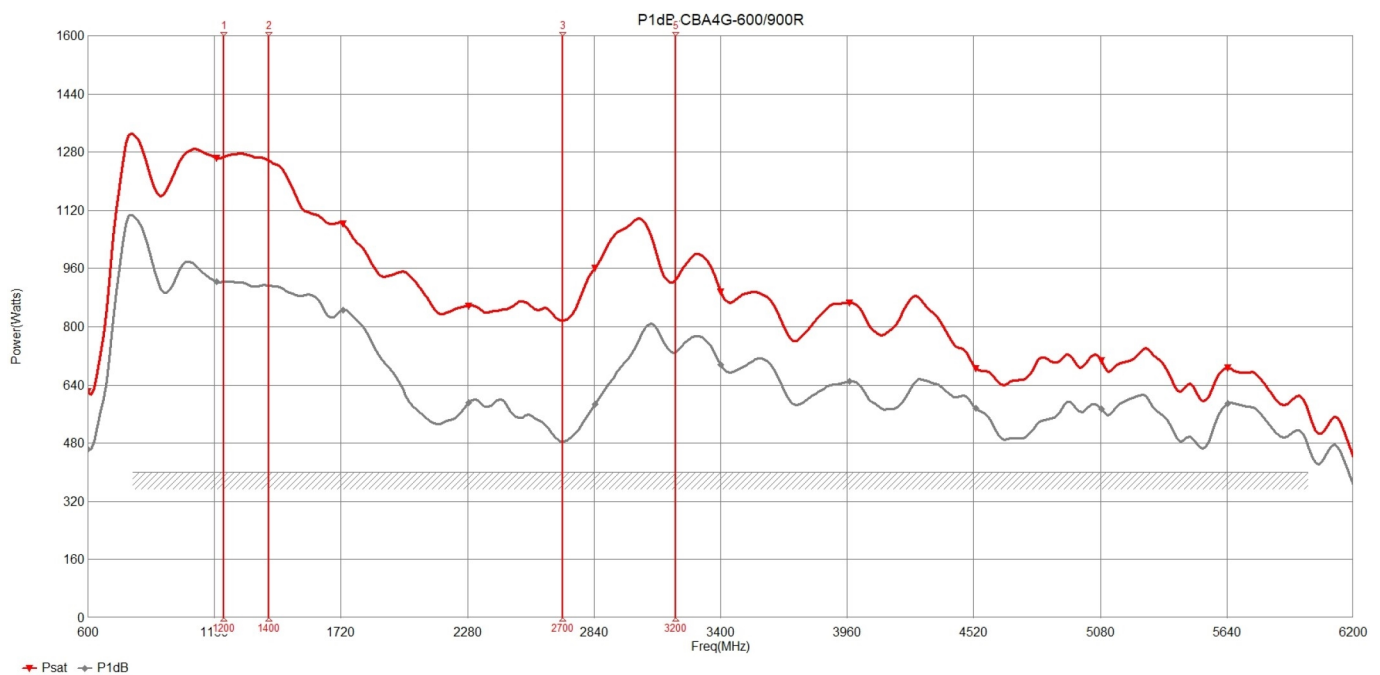
The touch screen color display gives an immediate visual indication of forward and reverse power along with the current operating status of the amplifier and access to diagnostic information such as gate current and heatsink temperature.

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 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.



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
Small Signal Gain	52 dB
Harmonics @ P1dB (typ)	-18 dBc
3rd Order Intercept Point	10 dB > P1dB
Modulation Formats	AM, FM, PM, ODFM
Maximum Input Power (no damage)	10 dBm
Gain Control Adjustment (when below	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) (typ)
Output VSWR	2:1 (typical) (typ)
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)	1000 W
Radar Tune 1 Harmonic Level (typ)	-18 dBc

Radar Tune 2

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

Mechanical Specifications

Safety Interlock	Via rear panel mounted BR2-female
Supply Frequency	47 to 63
Supply Power (typ.)	5.5 kVA
RF Input Connector	
RF Output Connector	7/16 (f)
RF Sample Port Connectors	
Com. Interface	GPIO, RS232, Ethernet & USB
Dimensions (WxHxD)	See, "Available Variants" chart below
Weight kg	160 kg
Cooling System	Air Cooled, Self-contained

Available Product Configurations

Product	Configuration	Item #
CBA6G-900/600R-001	Front Panel RF Connectors, 1 Phase 180 to 265 VAC x 2 (16U Rack)	3-342402
CBA6G-900/600R-002	Rear Panel RF Connector, 1 Phase 180 to 265 VAC x 2 (16U Rack)	3-342403
CBA6G-900/600R-003	Front Panel RF Connectors, 3 Phase STAR, 5 Wire, 380 to 415 VAC Line to Line + N + E (19 inch, 20U Rack)	3-342404
CBA6G-900/600R-004	Rear Panel RF Connectors, 3 Phase STAR, 5 Wire, 380 to 415 VAC Line to Line + N + E (19 inch, 20U Rack)	3-342405
CBA6G-900/600R-005	Front Panel RF Connectors, 3 Phase DELTA, 4 Wire, 208 to 240 VAC Line to Line + E (19 inch, 20U Rack)	3-342406
CBA6G-900/600R-006	Rear Panel RF Connectors, 3 Phase DELTA, 4 Wire, 208 to 240 VAC Line to Line + E (19 inch, 20U Rack)	3-342407