Broadband Power Amplifier 0.8 - 3GHz 20W

CBA 9428

- **Reliable Class A**
- **Ideal for broadband communications applications**
- **Tested and matched to EMC applications**
- **Safe operation into open-circuit and short-circuit**



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The CBA 9428 is an amplifier capable of driving an antenna within a screened room to provide electromagnetic fields over the frequency range 0.8-3 GHz, during the course of radiated immunity tests on electrical equipment. The amplifier is designed with sufficient gain such that it may be used with normal output levels of signal sources.

The unit is powered from a switched mode power supply for high efficiency, high power factor and wide voltage range operation. The unit is air cooled with integral fans, and is protected against faulty cooling by excess temperature sensing.

A front panel indicator is provided to indicate over-temperature. The amplifier is designed for rugged operation into a variety of loads. The amplifier is primarily intended for use as a power source for EMC susceptibility testing, but is also applicable to other systems requiring a wide-band linear amplifier.

Technical Specifications	CBA 9428
Operational frequency range	0.8 to 3 GHz
Saturated output power	20W minimum
Linear power (<1dB gain compression)	17W minimum
Gain	43dB minimum
Gain flatness	+/- 2.5 dB
Input power for saturation	0dBm maximum
Maximum input power	10dBm
Input return loss	10dB minimum
Output impedance	50Ω nominal
Load VSWR mis-match tolerance	∞:1
Harmonics	-20dBc maximum at rated power
Input and output connector	type N female
EMC and Safety	
Conducted and radiated emissions	EN 61326 Class A
Conducted and radiated immunity	EN 61326:1997 Table 1
Mains harmonic currents	IEC 1000-3-2
Voltage fluctuations and flicker	IEC 1000-3-3
Safety	EN 61010-1
Power	
Operating voltage range	90-264 V AC, 47-63Hz
Power requirement <200 VA	
Power input connector	IEC60320 (IEC320, EN60320)
Environmental	
Operating temperature range	0 to 40°C, non-condensing
Mechanical	
Dimensions	19 inch 3U case, 440mm deep maximum
Weight	12 kg maximum