

CBA 250M-2500 10 kHz TO 250 MHz 2500 WATT CLASS A BROADBAND AMPLIFIER



This low frequency amplifier can be used in conjunction with other amplifiers from the Teseq range to cover the entire frequency range from 10 kHz to 40 GHz with convenient frequency break points allowing you to optimise the power level in each range.

The Class A design ensures a high reliability, low distortion linear performance across the frequency range and is 100% mismatch tolerant without foldback up to 50% reflected power .

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 safety interlock connector is provided, which the user can short circuit to ground, to put the amplifier into standby mode. Front panel indicators are provided to indicate over-temperature and rf interlock operation.

CBA 250-2500 Performance Data 4000 3500 3000 2500 'ower (W) 2000 1500 ypical Saturated Power 1000 ypical Linear Power Specification Saturated Powe 500 Specification P1dB Power 0 50 150 200 250 0 100 Frequency (MHz)



- Class A linear and low distortion design
- Ideal for low frequency tests using various strip line devices
- Mismatch tolerant and unconditionally stable
- USB, GPIB & Ethernet Interface

Three year parts and labour warranty

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Key RF Parameters

Frequency range (instantaneous)	0.01 to 250 MHz
Rated output power	2500W 10KHz-100MHz
	2500-1900W 100-250MHz (de-rating slope of 4.8W/MHz)
Output power at 1 dB gain compression	on 2100W 10KHz-100MHz
	2100-1300W 100-250MHz (de-rating slope of 5.33W/MHz)
Harmonics at 1 kW output power	Better than -20 dBc
Gain	64 dB
Gain variation with frequency	±3 dB
Maximum input power (no damage)	+10 dBm
Impedance/VSWR	
Output VSWR tolerance ¹	Infinite any phase
Stability	Unconditional
Output impedance	50 Ohms
Input VSWR	2:1 (Max)

Additional RF Data

Third order intercept point ²	70 dBm
RF connector style	Input Type N (f), Output 7/16 (f)

Electrical and Interfaces

Remote interface	USB, GPIB & Ethernet
Safety interlock	2 x BNC, S/C and O/C to Mute
Supply voltage (three phase)	184 to 264 Vac (phase to phase for Delta (Δ) or phase to neutral for star (Y)
Supply frequency range	47 to 63 Hz
Supply power	<11 KVA

Physical/Environmental

	Case dimensions	19 inch, 34U rack, 800 mm deep
	Weight	291 kg
	Operating temperature range	0 to 40°C

Notes:

- 1. Output VSWR tolerance is specified for excitation within the permitted levels and frequency range.
- 2. The third order intercept point is a nominal value, as its calculation depends upon the power level at which distortion measurements are made.



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