

## CBA4K400M-100E

### 4 KHz to 400 MHz 100 Watt Class A Solid State Amplifier



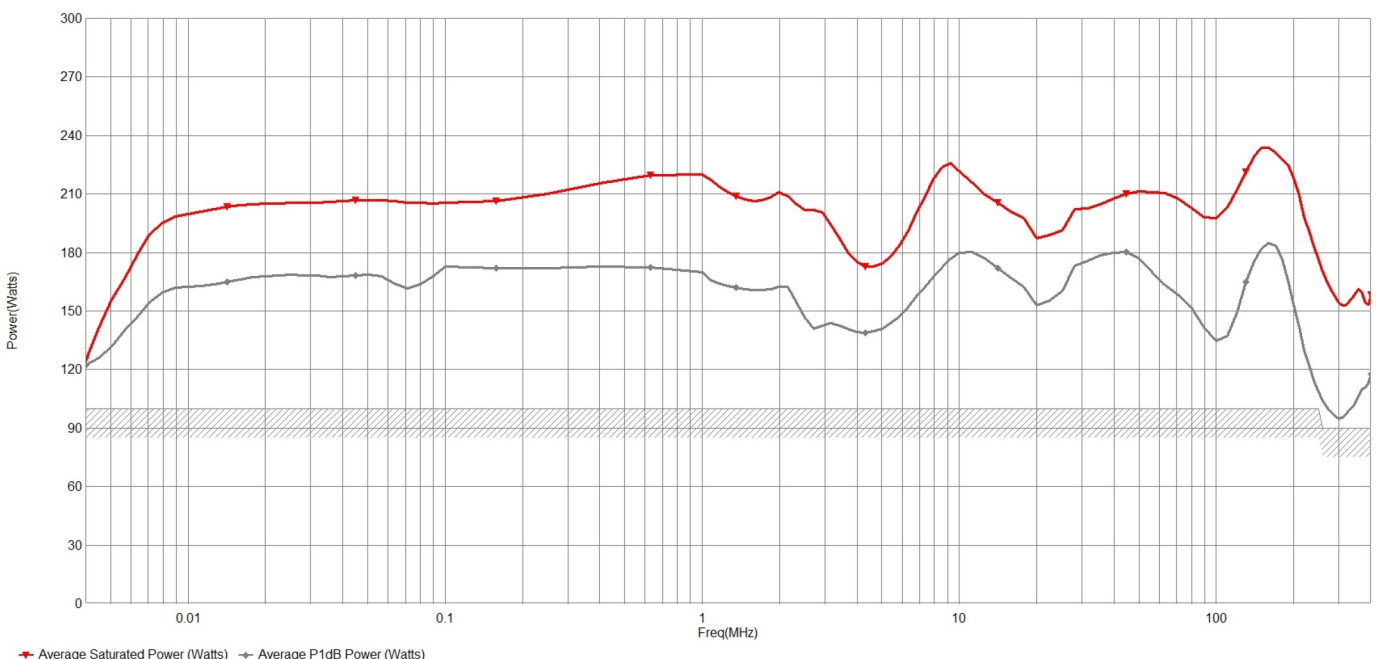
Designed specifically for automotive, military and aerospace BCI EMC testing, this mismatch tolerant Class A amplifier delivers power continuously into the varying match typically associated with this type of testing.

The Class A design ensures a high reliability, low distortion linear performance across the frequency range. This design also ensures that the amplifier will continue to operate at full power even when presented with an open or short circuit at its output.

#### MAIN FEATURES

- **Class A Operation**
- **Ethernet Remote Control**
- **100% Mismatch Tolerant with no Foldback**
- **Ideal for BCI Testing**
- **3 Year Warranty**
- **Applications: Radiated immunity (ISO, IEC, MIL)**
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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.



### Technical Specifications

Frequency Range	4 KHz - 400 MHz
Rated Output Power	110W (min) - 120W (typ)
Power Output @ 1dB Compression	4KHz to 250MHz 100W (min)
Power Output @ 1dB Compression	250MHz to 400MHz 89W (min)
Input for Rated Output	1 dBm
Small Signal Gain	4kHz to 6kHz 48.5dB - 6kHz to 400MHz 50dB dB
Small Signal Gain Variation	4kHz to 6kHz +/-2dB - 6kHz to 400MHz +/-6dB
Harmonics @ P1dB (min)	-20 dBc
Spurious	-70 dBc
Input VSWR	2:1 (max)
Output VSWR	2:1 (typ)
Output Impedance	50 Ohm
3rd Order Intercept Point	60 dB
Noise Figure	10 dB
Modulation Formats	AM, FM, PM, ODFM
Maximum Input Power (no damage)	10 dBm
Output VSWR Tolerance	Infinite any phase (no foldback)
Stability	Unconditional

### General Specifications

Acoustic Noise (measured @ 1 M)	58 dBA
Supply Frequency	47 to 63 (Hz)
Supply Power (typ)	1 KVA
Supply Voltage	90 to 264 VAC

### Mechanical Specifications

RF Input Connector	Type-N Female
RF Output Connector	Type N Female
Safety Interlock	Via rear panel mounted BNC-female
Dimensions (No Cabinet) (W x H x D)	48.3 x 13.4 x 36 cm (19 x 13.4 x 14.1 in) (3U)
Weight (No Cabinet)	18 Kg (39 lbs)
Cooling System	Air Cooled, Self-contained
Com. Interface	RS232 & Ethernet

### Environmental Specifications

Ambient Running Temperature	5°C to +40°C
Storage Temperature	-20°C to +50°C
Maximum Altitude	up to 2000M
Shock and Vibration	Normal Truck Transport

**Regulatory Compliance (CE)**

EMC	EN 61326-1
Safety	EN 61010-1
RoHS	DIRECTIVE 2011-65-EU
Export Classification	No Licence Required

**Available Configurations**

Product	Configuration	Item #
CBA4K400M-100E-001	Rack mount Case with Front Panel RF Connectors	3-342608
CBA4K400M-100E-002	Rack Mount Case with Rear Panel RF Connectors	3-342609
CBA4K400M-100E-007	Table Top Case with Front Panel RF Connectors	3-342610
CBA4K400M-100E-008	Table Top Case with Rear Panel RF Connectors	3-342611