

AR08M4-030

0.8 - 4.0 GHz 30 Watt P1dB Class A Amplifier



MAIN FEATURES

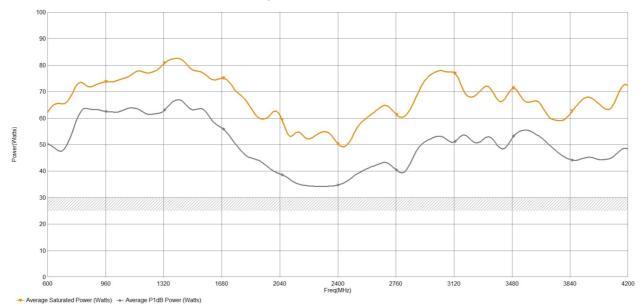
- Class A Operation
- **100% Mismatch Tolerant with no Foldback**
- Scalable Modular Construction
- Ethernet, USB, GPIB, RS-232 Remote Interface
- 3 Year Warranty
- Applications: Radiated immunity (ISO, IEC, MIL), Telecom Component Test and Aerospace&Defence

The Model AR08M4-030 solid-state, Class A design, self-contained, aircooled, broadband power amplifier. It is designed for applications requiring instantaneous bandwidth, high gain, and linearity. The amplifier provides a minimum of 30 watts P1dB across its operating bandwidth of 0.8 - 4.0 GHz. It includes protection from input overdrive beyond 10 dBm, as well as protection from various failure conditions such as over-temperature and power supply faults.

An easy-to-read front panel display shows the operational status and fault conditions. All amplifier control functions and status indications are available remotely using GPIB/IEEE-488, RS-232, USB, or Ethernet. Interface connectors are located on the back panel. The touchscreen on the front panel manages local and remote operation.

Its wide bandwidth also makes it suitable for 5G testing applications. The Class A design allows for continued operation into high VSWR loads, including open and short circuits, making it suitable for EMC Test applications offering a bandwidth of 0.8 to 8.0 GHz, when combined with a product from the AR4i8 series.

The export classification for this equipment is NLR (No Licence Required). This equipment is controlled for export in accordance with the U.K. Export Administration Regulations. Diversion contrary to U.K. law is prohibited.









Technical Specifications

| Frequency Range | 0.8 - 4.0 GHz |
|-------------------------------------|----------------------------------|
| Rated Output Power | 40W (min) - 50W (typ) |
| Input for Rated Output | 1 dBm |
| Power Output @ 1dB Compression | 30W (min) - 40W (typ) |
| Small Signal Gain | 45 dB |
| Gain Variation (max) ± | +/- 3.0 dB |
| Gain Control Adjust When Below P1dB | 30 dB |
| Harmonics @ P1dB (min) | -18 dBc |
| Spurious | -70 dBc |
| Input VSWR | 2:1 (max) |
| Output VSWR | 2:1 (typ) |
| Output Impedance | 50 Ohm |
| 3rd Order Intercept Point | 55 dB |
| Noise Figure | 12 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) | 62 dBA |
|---------------------------------|---------------|
| Supply Frequency | 47 to 63 (Hz) |
| Supply Power (typ) | 0.4 KVA |
| Supply Voltage Single Phase | 90 to 264 VAC |

Mechanical Specifications

| RF Input Connector | Type-N Female |
|-------------------------------------|---|
| RF Output Connector | Type-N Female |
| RF Sample Port Connectors | Type-N Female, (coupling factor 40 dB typical) |
| Safety Interlock | Via rear panel mounted BNC-female |
| Dimentions (No Cabinet) (W x H x D) | 48.3 x 17.8 x 61.5 cm (19.0 x 7.0 x 24.2 in) (4U) |
| Weight (No Cabinet) | 15 kg (33 lbs) |
| Cooling System | Forced air (self contained fans) |
| Com. Interface | IEEE-488 / RS-232 / USB 2.0 / 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 |









| Product | Configuration | Item # |
|----------------|---------------------------|----------|
| AR08M4-030-001 | Front Panel RF Connectors | 4-342012 |
| AR08M4-030-002 | Rear Panel RF Connectors | 4-342013 |



Specifications subject to change without notice. AMETEK CTS is an ISO accredited company. Products are designed and manufactured under strict quality and environmental requirements of ISO 9001

