

## AR08M4-800

### 0.8 - 4.0 GHz 800 Watt P1dB Class A Amplifier



The Model AR08M4-800 solid-state, Class A design, self-contained, air-cooled, broadband power amplifier. It is designed for applications requiring instantaneous bandwidth, high gain, and linearity. The amplifier provides a minimum of 800 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.

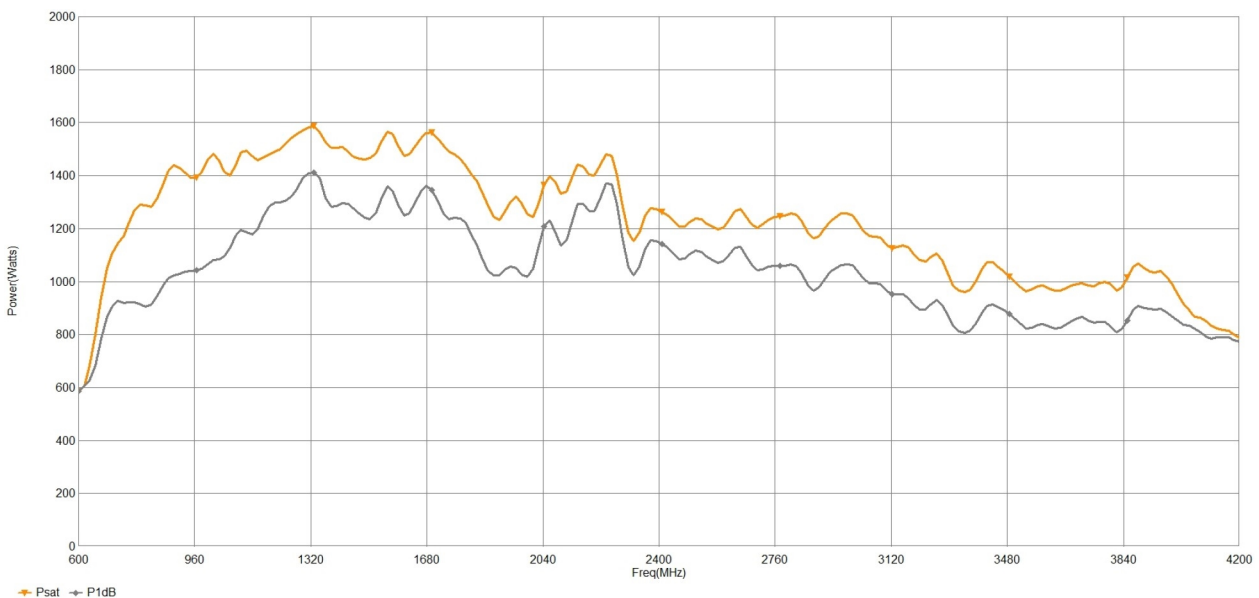
An easy-to-read front panel display shows the operational status and fault conditions. All amplifier control functions and status indications are available remotely using GPIB/IEEE-488, RS-232, USB, or Ethernet. Interface connectors are located on the back panel. The touchscreen on the front panel manages 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 3A001. This equipment is controlled for export in accordance with the U.K. Export Administration Regulations. Diversion contrary to U.K. law is prohibited.

#### 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**



### Technical Specifications

Frequency Range	0.8 - 4.0 GHz
Rated Output Power	1000W (min) - 1200W (typ) Watts
Input for Rated Output	1 dBm
Power Output @ 1dB Compression	800W (min) - 900W (typ) Watts
Small Signal Gain	59 dB
Gain Control Adjust When Below P1dB	30 dB
Harmonics @ P1dB (typ)	-20 dBc
Spurious	-70 dBc
Input VSWR	2:1 (max) (typ)
Output VSWR	2:1 (typ) (typ)
Output Impedance	50 Ohm
3rd Order Intercept Point	69 dB > P1dB
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)	64 dBA
Supply Frequency	47 to 63 (Hz)
Supply Power (typ)	5.2 KVA
Three Phase 5 Wire WYE	See, "Available Configurations" chart below VAC
Three Phase 4 Wire Delta	See, "Available Configurations" chart below VAC

### Mechanical Specifications

RF Input Connector	Type-N Female
RF Output Connector	Type-7/16 Female
RF Sample Port Connectors	Type-N Female, (coupling factor 53 dB typical)
Safety Interlock	Via rear panel mounted BNC-female
Dimensions (With Cabinet) (W x H x D)	51.0 x 111.0 x 100 cm (20.1 x 35.0 x 39.4 in) (25U)
Weight (With Cabinet)	220 Kg (485 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 M
Shock and Vibration	Normal Truck Transport

### Regulatory Compliance

EMC	EN 61326-1
Safety	EN 61010-1
RoHS	DIRECTIVE 2011-65-EU
Export Classification	3A001

## Available Configurations

Product	Configuration	Item #
AR08M4-800-003	Front Panel RF Connectors, 3 Phase, 5 Wire (3P+N+E), 380 to 415 VAC Line to Line	4-342022
AR08M4-800-004	Rear Panel RF Connectors, 3 Phase, 5 Wire (3P+N+E), 380 to 415 VAC Line to Line	4-342023
AR08M4-800-005	Front Panel RF Connectors, 3 Phase, 4 Wire (3P+E), 208 to 240 VAC Line to Line	4-342024
AR08M4-800-006	Rear Panel RF Connectors, 3 Phase, 4 Wire (3P+E), 208 to 240 VAC Line to Line	4-342025