

## 200TR4G8

- 200 Watts CW
- 4GHz-8GHz

## **Features**

The Model 200TR4G8 is a self contained, forced air cooled, broadband traveling wave tube (TWT) microwave amplifier designed for applications where instantaneous bandwidth and high gain are required. A reliable TWT provides a conservative 200 watts minimum at the amplifier output connector. Stated power specifications are at the fundamental frequency.

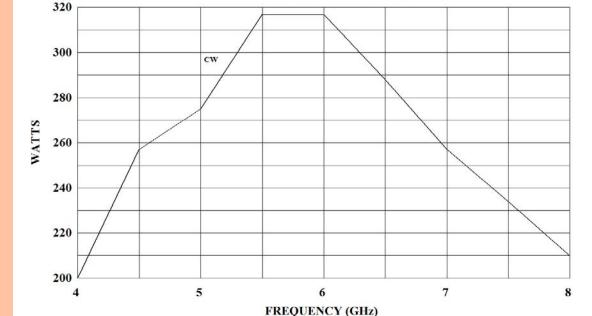
The amplifier's front panel digital display shows forward and reflected output plus extensive system status information accessed through a series of menus via soft keys. Status indicators include power on, warm-up, standby, operate, faults, excess reflected power warning and remote. Standard features include a built-in IEEE-488 (GPIB) interface, 0 dBm input, VSWR protection, gain control, RF output sample port, auto sleep, plus monitoring of TWT helix current, cathode voltage, collector voltage, heater current, heater voltage, baseplate temperature and cabinet temperature.

Modular design of the power supply and RF components allow for easy access and repair. Use of a switching mode power supply results in significant weight reduction.

This unit is designed for 19 inch rack mounting, offers four side mounted carry handles, plus non-slip feet for bench top use. Model 200TR4G8 provides readily available RF power for a variety of applications in Test and Measurement, (including EMC RF susceptibility testing), Industrial and University Research and Development, and Service applications.

Contact AR RF/Microwave Instrumentation for information on other models with alternative packaging and features.

The export classification for this equipment is EAR99. These commodities, technology or software are controlled for export in accordance with the U.S. Export Administration Regulations. Diversion contrary to U.S. law is prohibited.



200TR4G8 TYPICAL POWER OUTPUT

AR RF/Microwave Instrumentation 160 School House Rd Souderton, PA 18964 215-723-8181

For an applications engineer call:800.933.8181

www.arworld.us



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## **Specifications**

POWER (fundamental), CW @ OUTPUT FLANGE: Nominal 262 watts: Minimum 200 watts

FLATNESS: ±12 dB maximum

FREQUENCY RESPONSE: 4-8 GHz instantaneously

INPUT FOR RATED OUTPUT: 1.0 milliwatt maximum

GAIN (at maximum setting): 53 dB minimum

GAIN ADJUSTMENT (continuous range): 35 dB mini-

mum

INPUT IMPEDANCE: 50 ohms, VSWR 2.0:1 maximum

**OUTPUT IMPEDANCE:** 50 ohms, VSWR 2.5:1 typical

MISMATCH TOLERANCE: Output power fold back protection at reflected power exceeding 40 watts. Will operate without damage or oscillation with any magnitude and phase of source and load impedance. May oscillate with unshielded open due to coupling to input. Should not be tested with connector off.

**MODULATION CAPABILITY:** Will faithfully reproduce AM, FM, or pulse modulation appearing on the input signal. AM peak envelope power limited to specified power.

NOISE POWER DENSITY: Minus 64 dBm/Hz maximum, Minus 70 dBm/Hz typical

HARMONIC DISTORTION: Minus 4 dBc maximum,

minus 7 dBc typical

PRIMARY POWER: 190-260 VAC, 50/60 Hz single

phase, 2 KVA maximum

CONNECTORS:

RF input: Type N female, rear panel RF output: Type N female, rear panel RF output sample port: Type N female, rear panel GPIB: IEEE-488 (f), rear panel DB-15 (f), rear panel

**COOLING:** Forced air (self contained fans), air entry

and exit in rear.

**SIZE (W x H x D):**  $48.3 \times 26.7 (6U) \times 68.6 \text{ cm}, 19 \times 10^{-2} \text{ cm}$ 

10.5 (6U) x 27 in

**WEIGHT (approximate):** 41 kg, 90 lb **EXPORT CLASSIFICATION:** EAR99