



Model 200TR4G8
200 Watts CW
4GHz–8GHz

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.

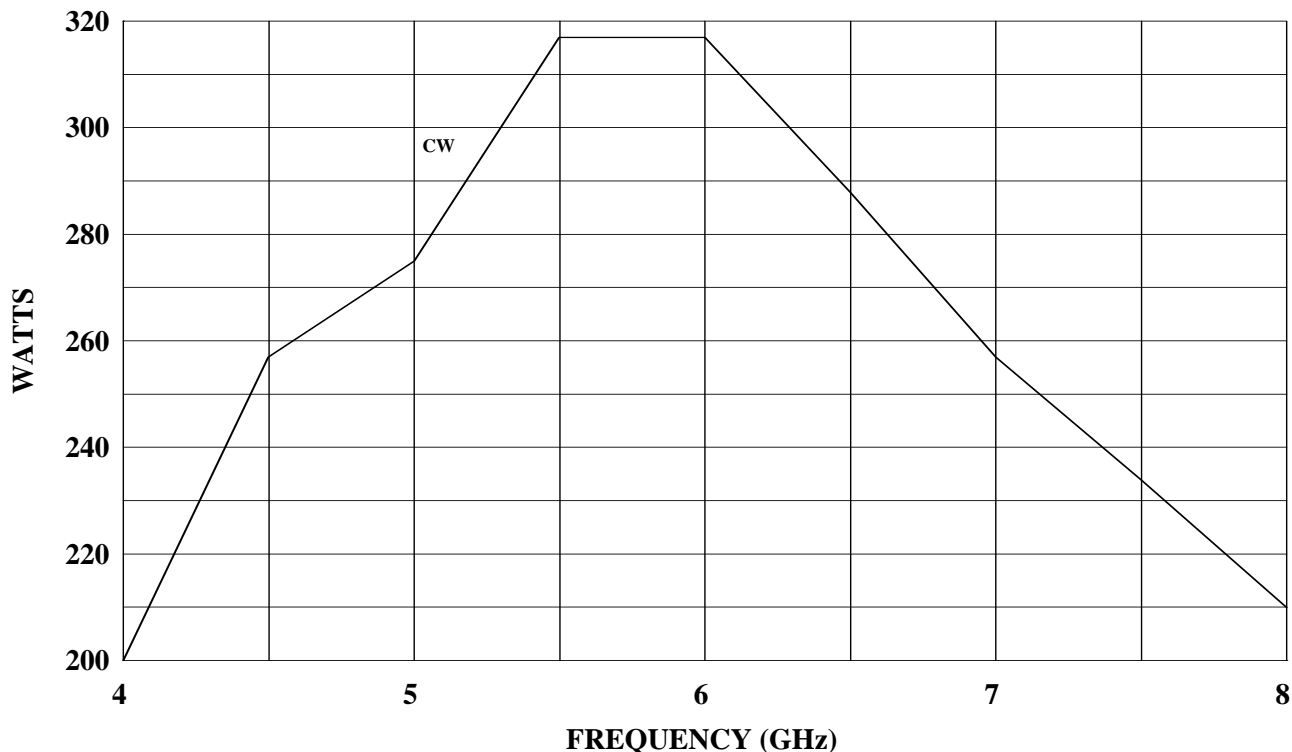
The amplifier's front panel digital display shows forward and reflected output plus extensive system status information accessed through a series of menus via soft keys. Status indicators include power on, warm-up, standby, operate, faults, excess reflected power warning and remote. Standard features 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.

200TR4G8 TYPICAL POWER OUTPUT



SPECIFICATIONS, MODEL 200TR4G8

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 minimum

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 on rear panel
RF output Type N female on rear panel
RF output sample port Type N female on rear panel
GPIB IEEE-488 (f) on rear panel
Interlock DB-15 (f) on rear panel

COOLING Forced air (self contained fans), air entry and exit in rear.

SIZE (W x H x D) 48.3 x 26.7 (6U) x 68.6 cm, 19 x 10.5 (6U) x 27 in

WEIGHT (approximate) 41 kg, 90 lb