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.
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