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MODEL 200T1G2
M2, M4
200 WATTS CW
1 - 2 GHz

The Model 200T1G2 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 250 watt TWT provides a conservative 200 watts minimum at the amplifier output connector. Stated power specifications are at the fundamental frequency.

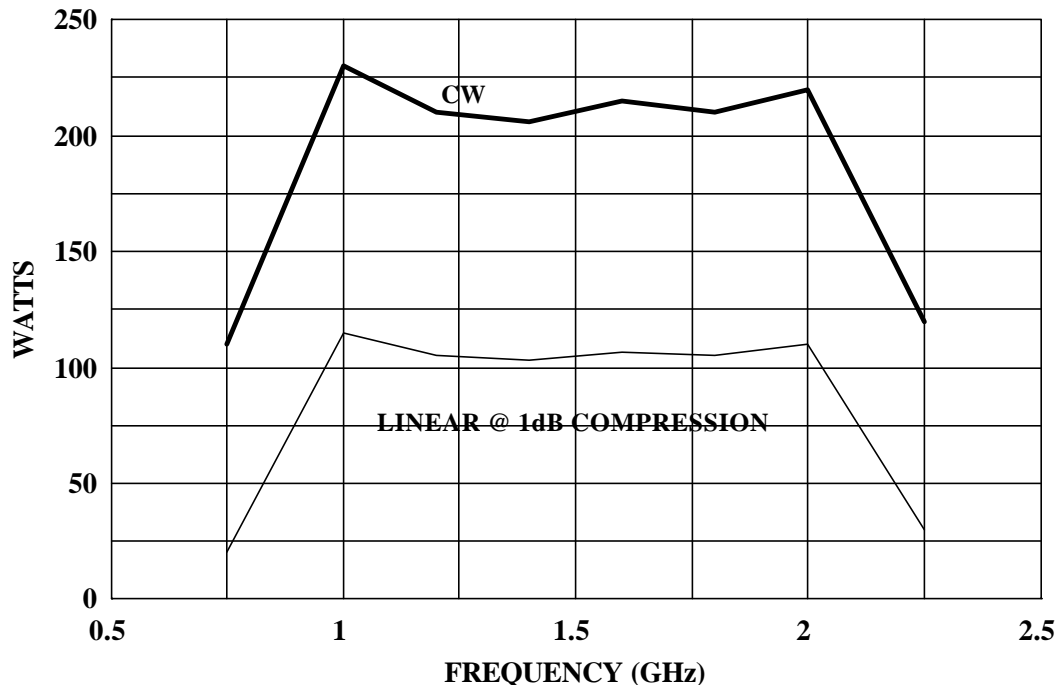
The amplifier's front panel digital display shows forward and reflected output plus extensive system status information accessed through a series of menus via soft keys. Status indicators include power on, warm-up, standby, operate, faults, excess reflected power warning and remote. Standard features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

Housed in a stylish contemporary cabinet, this unit is designed for benchtop use but can be removed from the cabinet for rack mounting. The Model 200T1G2 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.

See Model Configuration for package alternatives.

MODEL 200T1G2 TYPICAL POWER OUTPUT



SPECIFICATIONS Model 200T1G2

POWER (fundamental) , CW, @ OUTPUT CONNECTOR

Nominal..... 215 watts
Minimum 200 watts
Linear @ 1dB Compression..... 100 watts minimum

FLATNESS (at rated power)..... ±5 dB maximum at rated power

FREQUENCY RESPONSE 1-2 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 foldback 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 72 dBm/Hz (maximum)
Minus 77 dBm/Hz (typical)*

HARMONIC DISTORTION..... *Minus 4 dBc maximum, Minus 6 dBc typical*

PRIMARY POWER *190-260 VAC
50/60 Hz single phase
2.5 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.*

MODEL CONFIGURATIONS

<i>Model Number</i>	<i>Description</i>	<i>Weight</i>	<i>Size (W x H x D)</i>
<i>200T1G2</i>	<i>With removable enclosure</i>	<i>57 kg (125 lb)</i>	<i>50.3 x 29.7 x 68.6 cm 19.8 x 11.7 x 27 in</i>
<i>200T1G2M4</i>	<i>Shipped without an outer cabinet</i>	<i>43 kg (95lb)</i>	<i>48.3 x 26.7 x 68.6cm 19.0 x 10.5 x 27in</i>
<i>200T1G2M2</i>	<i>Enclosure removed for rack mounting – slides and front handles installed</i>	<i>45 kg (100lb)</i>	<i>48.3 x 26.7 x68.6 cm 19.0 x 10.5 x 27 in</i>