

"T" Series amplifiers—specifications

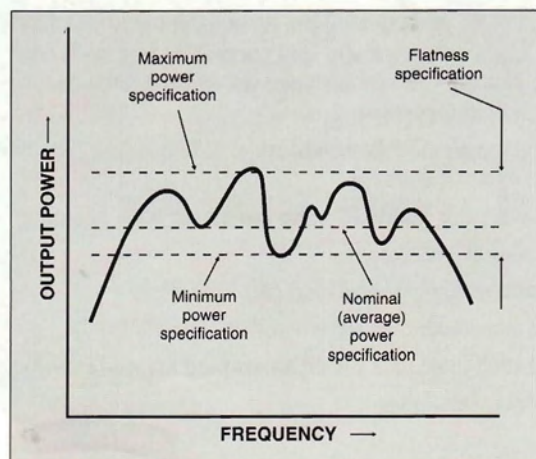
	Model 200T1G2	Model 200T1G3	Model 200T2G4	Model 200T4G8	Model 200T8G18
Power output, cw at output connector minimum linear (at 1 dB compression)	200 watts 100 watts min.	200 watts 100 watts min.	200 watts 100 watts min.	200 watts 100 watts min.	200 watts 100 watts min.
Flatness	± 5 dB max.	± 5 dB from 1.0-2.0 GHz, ± 12 dB from 0.8-2.8 GHz	± 5 dB max.	± 5 dB max.	8-12.4 GHz, ± 5 dB max.; 8-18 GHz, ± 8 dB max.
Frequency response (instantaneous)	1-2 GHz	0.8-2.8 GHz	2-4 GHz	4-8 GHz	8-18 GHz
Input for rated output	1.0 mW max.	1.0 mW max.	1.0 mW max.	1.0 mW max.	1.0 mW max.
Power gain (at max. setting)	53 dB min.	53 dB min.	53 dB min.	53 dB min.	53 dB min.
Gain adjustment (continuous range)	35 dB min.	35 dB min.	35 dB min.	35 dB min.	35 dB min.
Input impedance	50 ohms, VSWR 2.0:1 max.	50 ohms, VSWR 2.0:1 max.	50 ohms, VSWR 2.0:1 max.	50 ohms, VSWR 2.0:1 max.	50 ohms, VSWR 2.0:1 max.
Output impedance	50 ohms, VSWR 2.5:1 typ.	50 ohms, VSWR 2.5:1 typ.	50 ohms, VSWR 2.5:1 typ.	50 ohms, VSWR 2.5:1 typ.	50 ohms, VSWR 2.5:1 typ.
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	-72 dBm/Hz (max.) -77 dBm/Hz (typ.)	-72 dBm/Hz (max.) -77 dBm/Hz (typ.)	-66 dBm/Hz (max.) -77 dBm/Hz (typ.)	-64 dBm/Hz (max.) -70 dBm/Hz (typ.)	-72 dBm/Hz (max.) -77 dBm/Hz (typ.)
Harmonic distortion	-4 dBc max., -6 dBc typ.	-3 dBc max., -6 dBc typ.	-4 dBc max., -5.2 dBc typ.	-4 dBc max., -5.2 dBc typ.	Up to 10 GHz: -5 dBc max., -9 dBc typ. 10-12 GHz: -8 dBc max., -12 dBc typ. Above 12 GHz: -20 dBc max., -30 dBc typ. at 200 watts
Primary power	190-260 Vac 50/60 Hz single phase 2.5 kVA max.	190-260 Vac 50/60 Hz single phase 2.5 kVA max.	190-260 Vac 50/60 Hz single phase 2.0 kVA max.	190-260 Vac 50/60 Hz single phase 2.0 kVA max.	190-260 Vac 50/60 Hz single phase 2.0 kVA max.
Connectors					
rf input (on rear panel)	Type N female	Type N female	Type N female	Type N female	Type N female
rf output (on rear panel)	Type N female	Type N female	Type N female	Type N female	Type WRD-750 waveguide flange
rf output sample port (on rear panel)	Type N female	Type N female	Type N female	Type N female	Type N female
Cooling	Forced air (self-contained fans, air entry and exit in rear)				
Weight	57 kg (125 lb)	68 kg (150 lb)	54 kg (120 lb)	54 kg (120 lb)	57 kg (125 lb)
Dimensions (W x H x D)	50.3 x 29.7 x 68.6 cm (19.8 x 11.7 x 27 in.)	50.3 x 29.7 x 76.2 cm (19.8 x 11.7 x 30 in.)	50.3 x 29.7 x 68.6 cm (19.8 x 11.7 x 27 in.)	50.3 x 29.7 x 68.6 cm (19.8 x 11.7 x 27 in.)	50.3 x 29.7 x 68.6 cm (19.8 x 11.7 x 27 in.)

Minimum performance

The reliable way to rate microwave power amplifiers

Using normal rating methods, the "T" Series amplifiers described here would be rated at 250 watts, because they use 250-watt traveling-wave tubes. Instead, these ready-to-use benchtop test instruments contain the most commonly requested options (menu-selectable forward and reverse power metering, IEEE-488 interface, extensive TWT protection under any load-VSWR condition), and are rated by the *minimum* output they provide over the full operating bandwidth, measured at the amplifiers' output connectors.

To obtain the same performance information from other manufacturers, request minimum-rated performance, measured at the output connector or flange, with all options installed.





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