

# Specifications

## 1W1000

## 10W1000A

<b>Power output, cw</b> typical minimum	2 watts 1 watt	18 watts 10 watts
<b>Power output, cw linear</b> (less than 1 dB compression into 50 ohms)	1 watt minimum	10 watts minimum
<b>Flatness</b>	± 1.0 dB maximum; ± 0.5 dB typical	± 1.5 dB maximum; ± 1.0 dB typical
<b>Frequency response</b> (instantaneous)	100 kHz to 1000 MHz	500 kHz to 1000 MHz
<b>Input for rated output</b>	1.0 milliwatt max.	1.0 milliwatt max.
<b>Power gain</b> (at maximum setting)	30 dB minimum	40 dB minimum
<b>Gain control range</b>	N/A	10 dB minimum
<b>Input impedance</b>	50 ohms; VSWR 2.0:1 max.	50 ohms; VSWR 2.0:1 max.
<b>Output impedance</b>	50 ohms; VSWR 2.5:1 max.	50 ohms nominal
<b>Mismatch tolerance</b> (ability to operate without damage, foldback, or oscillation with any magnitude and phase of source and load impedance)	100%	100%
<b>Class of operation</b>	A	A
<b>Modulation capability</b> (ability to reproduce faithfully AM, FM, or pulse modulation appearing on input signal)	100%	100%
<b>Noise figure</b>	8 dB typical	noise floor data on request
<b>Harmonic distortion</b>	Minus 20 dBc max. at 1 watt	Minus 20 dBc max. at 10 watts
<b>Third-order intercept point</b>	42 dBm typical	50 dBm typical
<b>Primary power</b> (select via internal taps)	100/110/120/200/208/220/ 240 Vac ± 5%, 50/60 Hz, single-phase, 85 W max.	100/110/120/200/208/220/ 240 Vac ± 5%, 50/60 Hz, single-phase, 300 W max.
<b>RF connectors</b>	Type N female	Type N female
<b>Cooling</b>	Natural convection	Forced air (self-contained fans)
<b>Weight</b>	6.8 kg (15 lb)	16.0 kg (35 lb)
<b>Dimensions (W x H x D)</b>	26.2 x 15.2 x 20.3 cm (10.3 x 6.0 x 8.0 in.)	50.3 x 15.5 x 30.0 cm (19.8 x 6.1 x 11.8 in.)
<b>Additional features</b>	Model 1W1000 is available as an OEM rf circuit module without power supply. Contact Amplifier Research for further information.	Front panel gain control. RF input overdrive protection limits input; amplifier does not shut down. Over-temperature fault protection.

### Typical power curves

