

Specifications

1W1000

10W1000A

Power output, cw typical minimum	2 watts 1 watt	18 watts 10 watts
Power output, cw linear (less than 1 dB compression into 50 ohms)	1 watt minimum	10 watts minimum
Flatness	± 1.0 dB maximum; ± 0.5 dB typical	± 1.5 dB maximum; ± 1.0 dB typical
Frequency response (instantaneous)	100 kHz to 1000 MHz	500 kHz to 1000 MHz
Input for rated output	1.0 milliwatt max.	1.0 milliwatt max.
Power gain (at maximum setting)	30 dB minimum	40 dB minimum
Gain control range	N/A	10 dB minimum
Input impedance	50 ohms; VSWR 2.0:1 max.	50 ohms; VSWR 2.0:1 max.
Output impedance	50 ohms; VSWR 2.5:1 max.	50 ohms nominal
Mismatch tolerance (ability to operate without damage, foldback, or oscillation with any magnitude and phase of source and load impedance)	100%	100%
Class of operation	A	A
Modulation capability (ability to reproduce faithfully AM, FM, or pulse modulation appearing on input signal)	100%	100%
Noise figure	8 dB typical	noise floor data on request
Harmonic distortion	Minus 20 dBc max. at 1 watt	Minus 20 dBc max. at 10 watts
Third-order intercept point	42 dBm typical	50 dBm typical
Primary power (select via internal taps)	100/110/120/200/208/220/ 240 Vac $\pm 5\%$, 50/60 Hz, single-phase, 85 W max.	100/110/120/200/208/220/ 240 Vac $\pm 5\%$, 50/60 Hz, single-phase, 300 W max.
RF connectors	Type N female	Type N female
Cooling	Natural convection	Forced air (self-contained fans)
Weight	6.8 kg (15 lb)	16.0 kg (35 lb)
Dimensions (W x H x D)	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.)
Additional features	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

