



1U1000

- 1 Watt CW
- 10kHz–1000MHz

Features

The Model 1U1000 is a solid-state, self-contained, air-cooled, broadband amplifier designed for applications where instantaneous bandwidth, high gain and linearity are required. Housed in a stylish, contemporary cabinet, the unit is designed for benchtop use.



The Model 1U1000, when used with a sweep generator, will provide a minimum of 1 watt of RF power. Included is a front panel gain control which permits the operator to conveniently set the desired output level.

The 1U1000 is protected from RF input overdrive by an RF input leveling circuit which controls the RF input level to the RF amplifier first stage when the RF input level is increased above 0dBm. The Model 1U1000 is equipped with a control panel which provides a gain control adjustment knob. The Model 1U1000 provides readily available RF power for typical applications such as RF susceptibility testing, antenna and component testing, watt meter calibration, and as a driver for frequency multipliers and higher power amplifiers.

The export classification for this equipment is EAR99. These commodities, technology or software are controlled for export in accordance with the U.S. Export Administration Regulations. Diversion contrary to U.S. law is prohibited.

1U1000 Typical Output Power



AR RF/Microwave
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1U1000

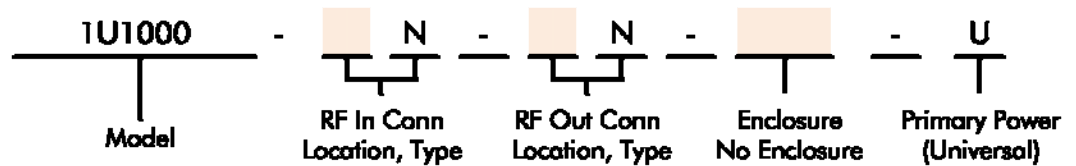
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Specifications

RATED OUTPUT POWER: 1 watt minimum
INPUT FOR RATED OUTPUT: 1.0 mW Max
POWER OUTPUT @ 3dB COMPRESSION:
 Typical: 1.5 watts, Minimum: 1.0 watt
POWER OUTPUT @ 1dB COMPRESSION:
 Typical: 1.5 watts, Minimum: 1.0 watt
FLATNESS: ±0.8 dB typical, ±1.0 dB maximum
FREQUENCY RESPONSE: 10kHz-1000 MHz instantaneously
GAIN (at maximum setting): 30 dB minimum
GAIN ADJUSTMENT (Continuous Range): 20 dB minimum
INPUT IMPEDANCE: 50 ohms, VSWR 2.0:1 maximum
OUTPUT IMPEDANCE: 50 ohms nominal
MISMATCH TOLERANCE: 100% of rated power without foldback. Will operate without damage or oscillation with any magnitude and phase of source and load impedance. See Application Note #27.
MODULATION CAPABILITY: Will faithfully reproduce AM, FM, or Pulse modulation appearing on input signal.

THIRD ORDER INTERCEPT: 42 dBm typical
NOISE FIGURE: 8 dB maximum, 6 dB typical
HARMONIC DISTORTION: Minus 20 dBc maximum at 1 watt, -30dBc typical
SPURIOUS: Minus 73 dBc typical
PRIMARY POWER (selected automatically): 90-264 VAC, 50/60Hz, 50 watts
CONNECTORS:
 RF Input: N female, front
 RF Output: N female, front
COOLING: Forced air (self contained fans)
WEIGHT: 4.5 kg (11 lbs)
SIZE (W x H x D): 26.0 x 11.4 x 28.2 cm (10.25 x 4.5 x 11.1 in)
EXPORT CLASSIFICATION: EAR99

Ordering Options



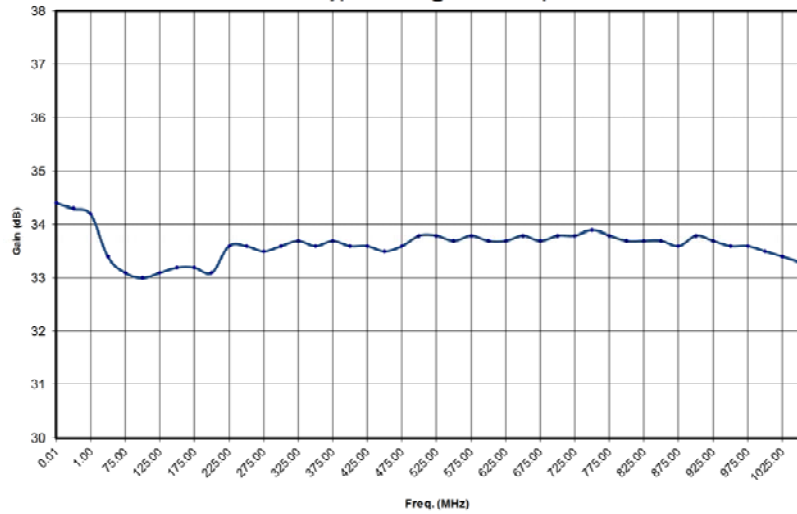
| CONNECTOR LOCATION | | ENCLOSURE | |
|--------------------|---|--------------|----|
| Front | F | Enclosure | E |
| Rear | R | No Enclosure | NE |

Contact your AR RF/Microwave Instrumentation Sales Associate for specific model configuration pricing.

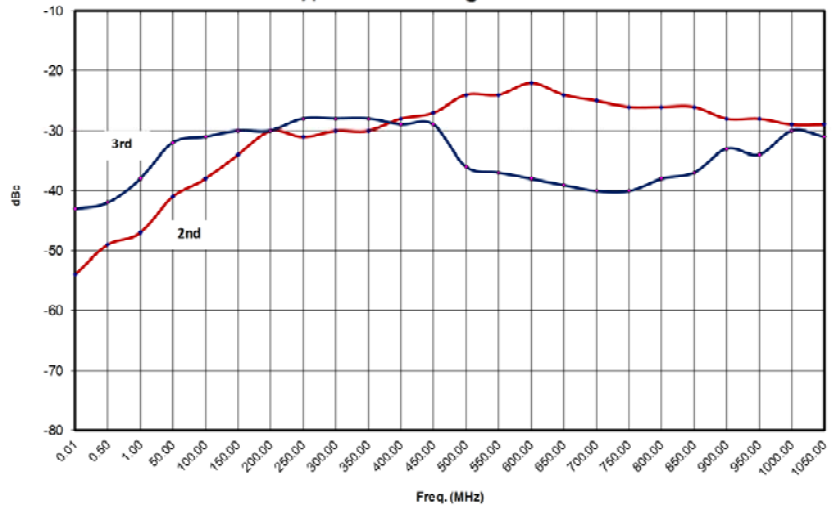
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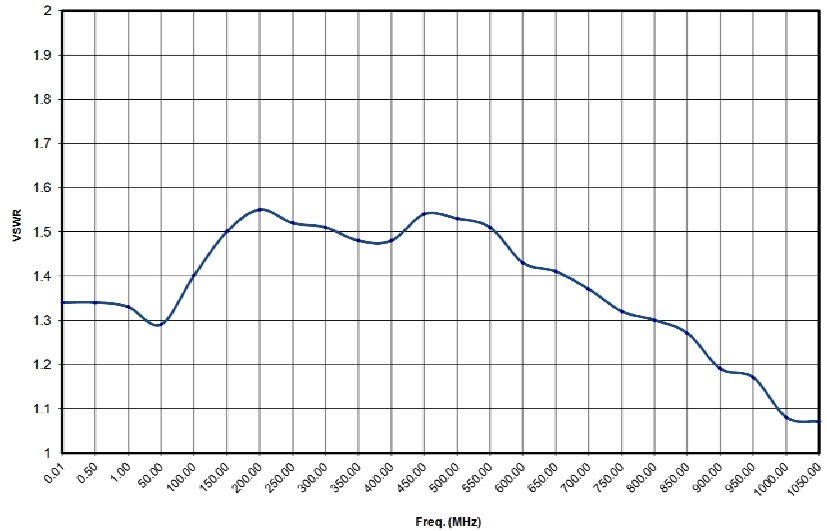
Typical Gain @ -20 dBm input



Typical Harmonics @ 1 watt



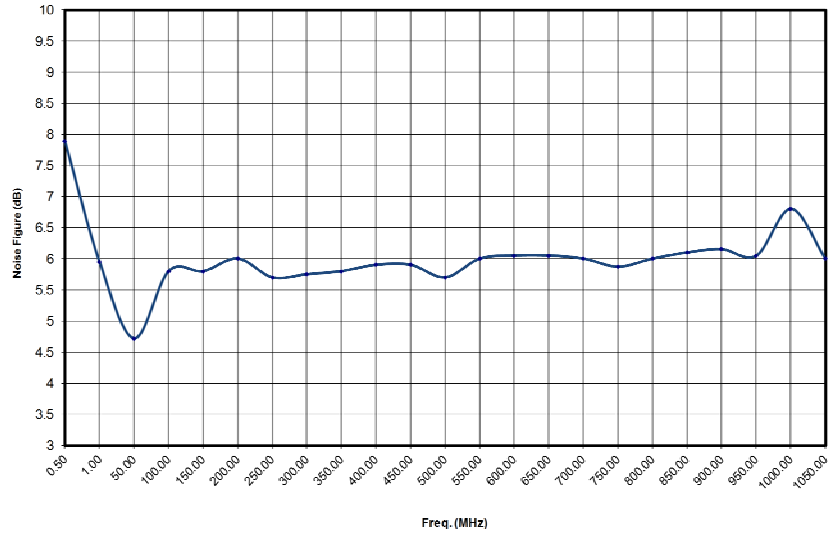
Typical Input VSWR



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Typical Noise Figure vs. Frequency



Envelope Drawing

