

### Features

# 2.5U1000

- 2.5 Watts CW
- 10kHz-1000MHz

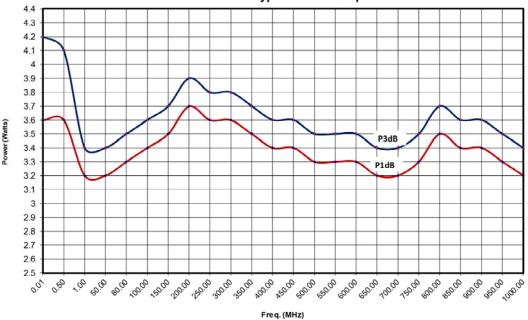
The Model 2.5U1000 is a solid-state, selfcontained, air-cooled, broadband amplifier designed for applications where instantaneous bandwidth, high gain and linearity are required. Housed in a stylish, contemporary cabinet, the unit is designed for benchtop use.



The Model 2.5U1000, when used with a sweep generator, will provide a minimum of 2 watts of RF power. Included is a front panel gain control which permits the operator to conveniently set the desired output level. The

2.5U1000 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 2.5U1000 is equipped with a control panel which provides a gain control adjustment knob. The Model 2.5U1000 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.



#### 2.5U1000 Typical Power Graph

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#### Specifications

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RATED OUTPUT POWER: 2.5 watts minimum

INPUT FOR RATED OUTPUT: 1.0 mW Max

POWER OUTPUT @ 3dB COMPRESSION: Typical: 3.0 watts, Minimum: 2.5 watts

**POWER OUTPUT @ 1dB COMPRESSION:** Typical: 2.5 watts, Minimum: 2.0 watts

FLATNESS: ±0.8 dB typical, ±1.0 dB maximum

FREQUENCY RESPONSE: 10kHz-1000 MHz instantaneously

GAIN (at maximum setting): 33 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: 45 dBm typical

NOISE FIGURE: 8 dB maximum, 6 dB typical

HARMONIC DISTORTION: Minus 20 dBc maximum at 2 watts

SPURIOUS: Minus 73 dBc typical

**PRIMARY POWER (selected automatically)**: 90-264 VAC, 50/60Hz, 50 watts

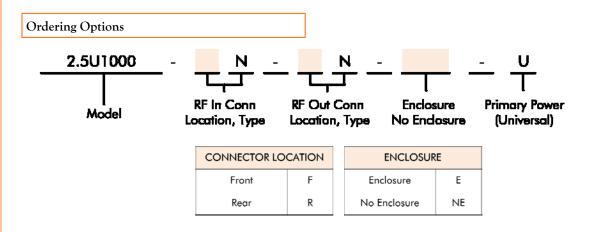
**CONNECTORS:** RF Input: N female, front RF Output: N female, front

COOLING: Forced air (self contained fans)

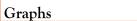
WEIGHT: 4.5 kg (11 lbs)

**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** 



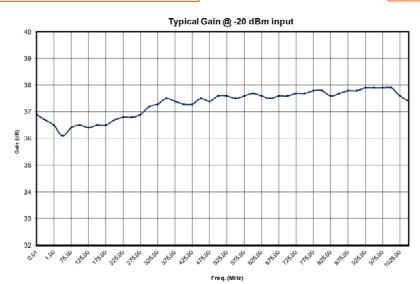
Contact your AR RF/Microwave Instrumentation Sales Associate for specific model configuration pricing.

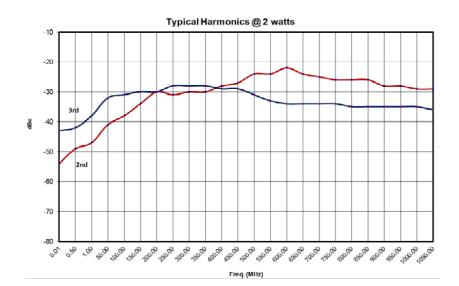


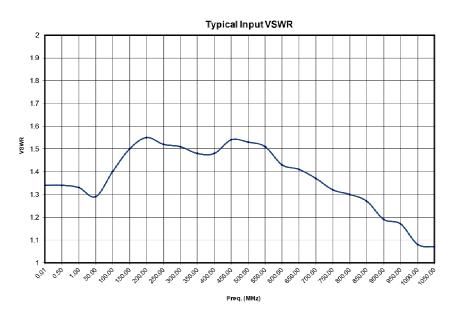


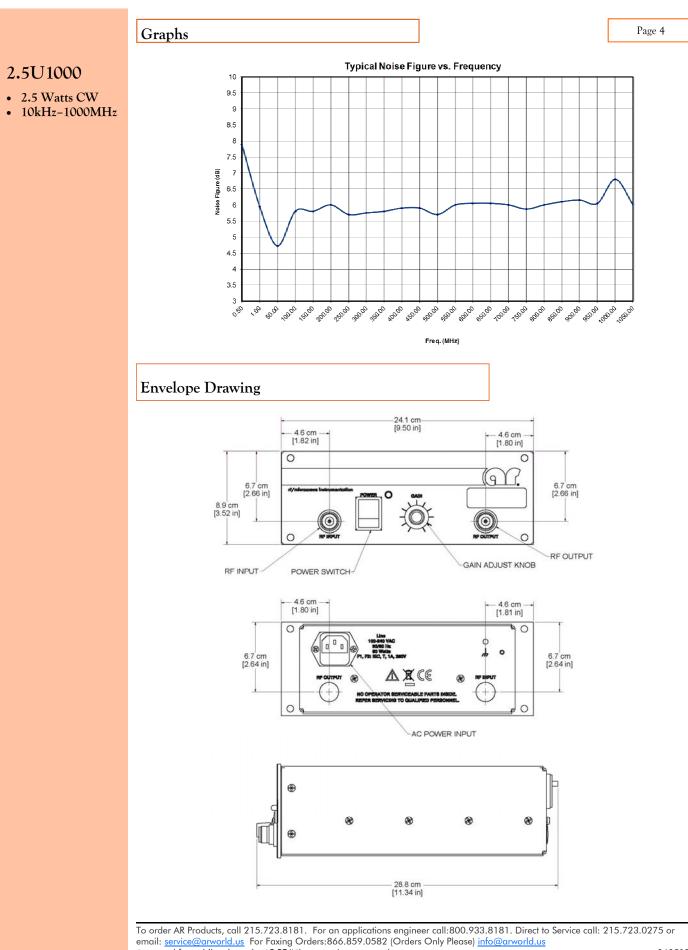
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Approved for public release by AR RF/Microwave Instrumentation

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