



## Model 1000S1G4

- 1000 Watts CW
- 0.8-4.2GHz

### Features

The Model 1000S1G4 is a portable, self-contained, air-cooled, broadband, completely solid-state amplifier designed for applications where instantaneous bandwidth, high gain and linearity are required. Quadrature-coupled circuitry is utilized in all high power stages in the interest of lowering distortion and improving stability. The Model 1000S1G4, when used with a sweep generator, will provide a minimum of 1000 watts of RF power.

The Model 1000S1G4 is equipped with a Digital Control Panel (DCP) which provides both local and remote control of the amplifier. The DCP uses a color LCD touch screen and a single rotary knob to offer status reporting and control capability. The display provides Forward Power and Reflected Power values plus amplifier status. Special features include a gain control and RF output level protection.

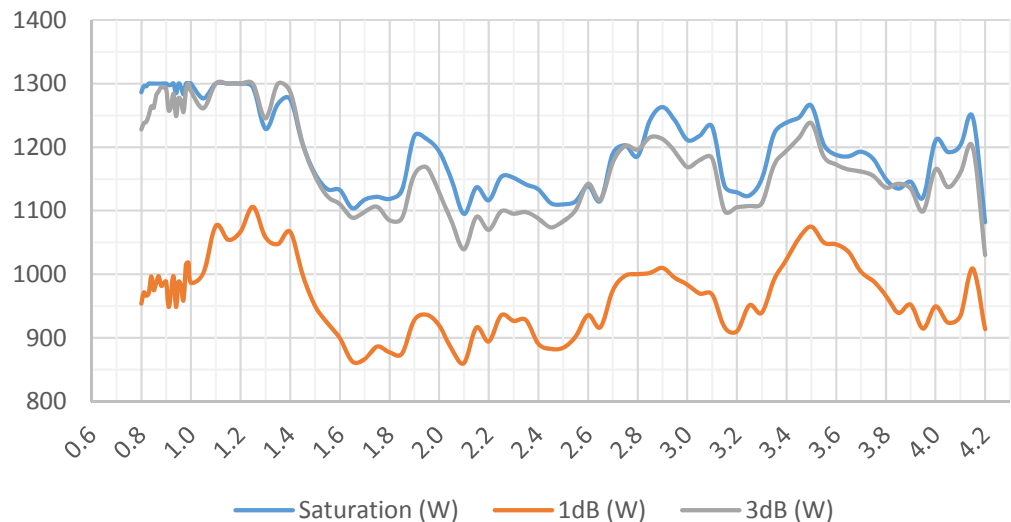
All amplifier control functions and status indications are available remotely in GPIB/IEEE-488 format, RS232 hardwire and fiber optic, USB and Ethernet. The buss interface connector is located on the back panel and positive control of local or remote operation is assured

by a keylock on the front panel of the amplifier.

The low level of spurious signals and linearity of the Model 1000S1G4 make it ideal for use as a driver amplifier in testing wireless and communication components and subsystems. It can be used as a test instrument covering multiple frequency bands and is suitable for a variety of communication technologies such as CDMA, W-CDMA, TDMA, GSM etc. It is also suitable for EMC Test applications where undistorted modulation envelopes are desired.

The export classification for this equipment is 3A001. 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.

MODEL 1000S1G4 TYPICAL POWER OUTPUT



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## Model

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## Specifications

**RATED OUTPUT POWER:** 1000 watts minimum

**INPUT FOR RATED OUTPUT:** 1.0 milliwatt maximum

**POWER OUTPUT @ 3dB COMPRESSION:** Nominal, 1050 watts; Minimum, 950 watts

**POWER OUTPUT @ 1dB COMPRESSION:** Nominal, 850 watts; Minimum, 800 watts

**FLATNESS:**  $\pm 2.0$  dB typical,  $\pm 2.5$  dB maximum

**FREQUENCY RESPONSE:** 0.8-4.2GHz instantaneously

**GAIN (at maximum setting):** 60.5 dB minimum

**GAIN ADJUSTMENT:** 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 up to 6.0:1, mismatch above which may limit to 500 watts reflected power. 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 the input signal.

**HARMONIC DISTORTION:** Minus 20 dBc maximum at 800 watts, -30 dBc typical at 800 watts.

**THIRD ORDER INTERCEPT POINT:** 68 dBm typical

**RF POWER DISPLAY:** Digital, forward and reflected

**PRIMARY POWER:** 200-240 VAC, 50/60 Hz, single phase, 5800 VA maximum

### CONNECTORS:

RF Input Type N female, rear

RF Output Type 7/8 EIA female, rear

Safety intlk 15 pin female subminiature D, rear

Remote computer interface

IEEE-488 (GPIB) & RS-232 connector, rear

Remote Computer Interface (Fiber Optic)

ST Conn Tx, RS-232 Rx

USB 2.0 Type B

Ethernet RJ-45

**IEEE-488 (GPIB) INTERFACE & RS-232:** Allows control and monitoring of all front panel controls except keylock position control

**COOLING:** Forced air (self contained fans)

**WEIGHT:** 244.8 kg (540 lbs)

**SIZE (W x H x D):** 68.8 x 202.2 x 82.5 cm (27.1 x 79.6 x 32.5 in)

**EXPORT CLASSIFICATION:** 3A001