



2000S1G2z5

- 2000 Watts CW
- 1.0-2.5GHz

Features

The Model 2000S1G2z5 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, but can be removed from the cabinet for immediate equipment rack mounting.

The 2000S1G2z5, when used with a sweep generator, will provide a minimum of 2000 watts of RF power. Included is a front panel gain control which permits the operator to conveniently set the desired output level. The 2000S1G2z5 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 0 dBm. The RF amplifier stages are protected from over-temperature by removing the DC voltage to them if an over-temperature condition occurs due to cooling blockage or fan failure.

The Model 2000S1G2z5 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 operational presentation of forward and reflected power plus operational status. Special features

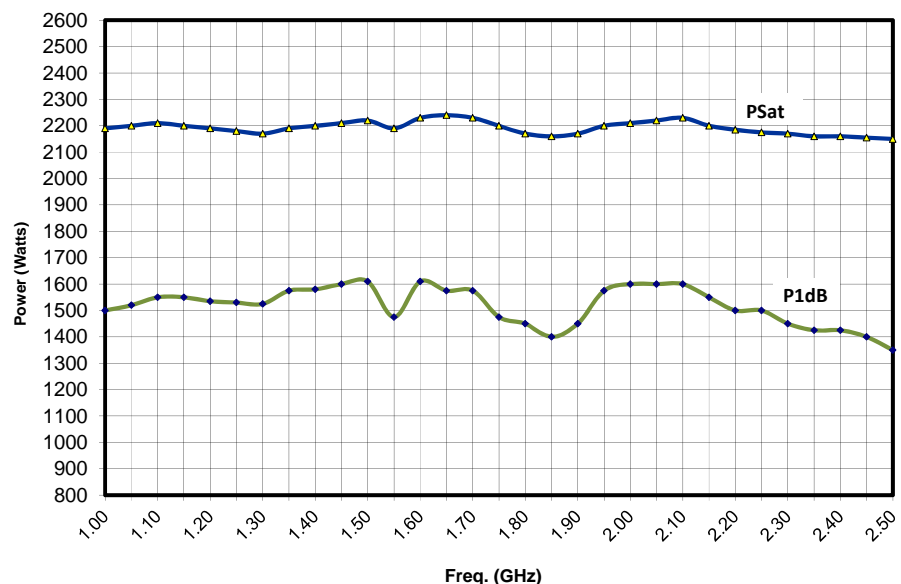
include again control, internal automatic leveling control (ALC) with front panel control of the ALC threshold, forward and reflected RF sample ports for precise power measurements and RF output level protection.

All amplifier control functions and status indications are available remotely in GPIB/IEEE-488 format, RS-232 hardwire and fiber optic, USB, and Ethernet. The bus interface connector is located on the back panel and positive control of local or remote operation is assured by a Local/Remote keylock on the front panel of the amplifier.

The low level of spurious signals and linearity of the Model 2000S1G2z5 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 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.

MODEL 2000S1G2z5 TYPICAL POWER OUTPUT



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Specifications

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RATED OUTPUT POWER: 2500 watts minimum

INPUT FOR RATED OUTPUT: 1.0 milliwatt maximum

POWER OUTPUT @ 3dB COMPRESSION: Nominal, 1850 watts; Minimum, 1750 watts

POWER OUTPUT @ 1dB COMPRESSION: Nominal, 1500 watts; Minimum, 1300 watts

AVERAGE OUTPUT POWER @ 3.2 GHz AND ABOVE: Less than 60 watts

FLATNESS: ± 1.5 dB typical, ± 2.0 dB maximum

FREQUENCY RESPONSE: 1.0-2.5GHz instantaneously

GAIN (at maximum setting): 63 dB minimum

GAIN ADJUSTMENT: Continuous Range, 4096 steps remote, 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 1000 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.

THIRD ORDER INTERCEPT POINT: 70 dBm typical

NOISE FIGURE: 10 dB typical

HARMONIC DISTORTION: Minus 20 dBc maximum at 1400 watts

SPURIOUS: Minus 73 dBc typical

PRIMARY POWER: 208 VAC, WYE (5-wire), 50/60 Hz, 3-phase, 12kVA

CONNECTORS:

RF Input	Type N female, rear
RF Output	Type 1-5/8 EIA female, rear
Safety intlk	15 pin female subminiature D, rear
Remote computer interfaces	
IEEE-488	24 pin
RS-232	9 pin subminiature D
RS-232 Fiber Optic	Type ST
USB 2.0	Type B
Ethernet	RJ-45

COOLING: Forced air (self-contained fans)

WEIGHT: 296 kg (650 lbs)

SIZE (W x H x D) (2 joined cabinets): 111.8 x 123.7 x 83 cm, 44.0 x 48.7 x 32.4 in

BASE REQUIREMENTS: 3" diameter/2" wide casters, height adjustable over 1". Must accommodate forklift.

EXPORT CLASSIFICATION: EAR99