



1000S1G2z5A

- 1000 Watts CW
- 1.0-2.5GHz

Features

The Model 1000S1G2z5A 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 1000S1G2z5A, when used with a sweep generator, will provide a minimum of 1000 watts of RF power. Included is a front panel gain control which permits the operator to conveniently set the desired output level. The 1000S1G2z5A 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 1000S1G2z5A 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

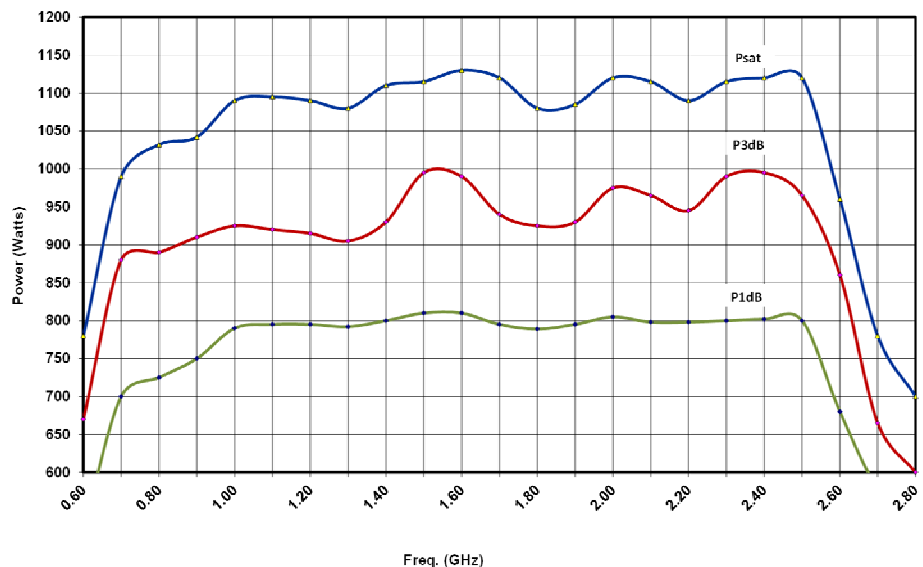
include a gain control, internal automatic leveling control (ALC) with front panel control of the ALC threshold, forward and reflected RF sample ports for precise power measurements and RF output level protection.

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 1000S1G2z5A 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 1000S1G2z5A TYPICAL POWER OUTPUT



AR RF/Microwave
Instrumentation
160 School House Rd
Souderton, PA 18964
215-723-8181

For an applications engineer call: 800.933.8181

www.arworld.us



1000S1G2z5A

- 1000 Watts CW
- 1.0-2.5GHz

Specifications

RATED OUTPUT POWER: 1000 watts minimum
INPUT FOR RATED OUTPUT: 1.0 milliwatt maximum
POWER OUTPUT @ 3dB COMPRESSION: Nominal, 1000 watts; Minimum, 925 watts
POWER OUTPUT @ 1dB COMPRESSION: Nominal, 850 watts; Minimum, 725 watts
FLATNESS: ±1.5 dB typical, ±2.0 dB maximum
FREQUENCY RESPONSE: 1.0-2.5GHz instantaneously
GAIN (at maximum setting): 60 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. 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: 69 dBm typical
NOISE FIGURE: 10 dB typical

HARMONIC DISTORTION: Minus 20 dBc maximum at 800 watts; Minus 20 dBc typical at 1000 watts
SPURIOUS: Minus 73 dBc typical
PRIMARY POWER: 200-264 VAC, 50/60 Hz, single phase, 4500 watts maximum
CONNECTORS:
RF Input Type N female
RF Output Type 7/8 EIA female
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)
EXPORT CLASSIFICATION: EAR99

MODEL CONFIGURATIONS

MODEL	RF INPUT	RF OUTPUT	WEIGHT	SIZE (W x H x D)
1000S1G2z5A	Type N female, front	Type 7/8 EIA female, front	148 kg (325 lbs)	50.3 x 127 x 61 cm 19.8 x 50 x 24 in
1000S1G2z5AM1	Type N female, rear	Type 7/8 EIA female, rear	148 kg (325 lbs)	50.3 x 127 x 61 cm 19.8 x 50 x 24 in