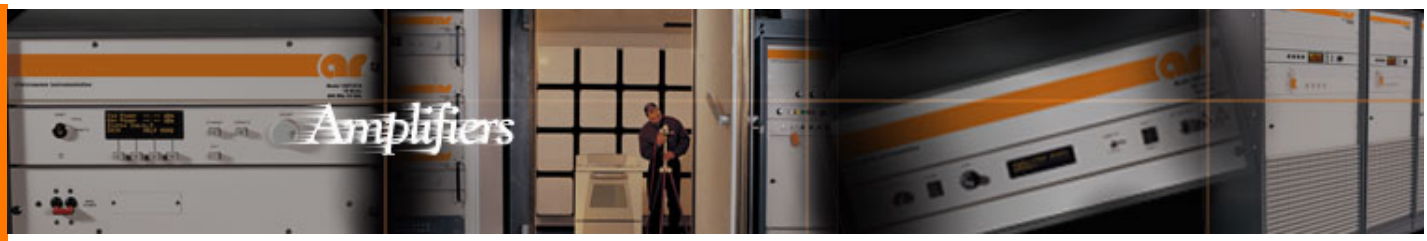


250S1G2z5A

- 250 Watts CW
- 1.0-2.5GHz

Features

The Model 250S1G2z5A is a self-contained, air-cooled, broadband, completely solid state amplifier designed for applications where instantaneous bandwidth, high gain and linearity are required. Housed in a single equipment rack, the 250S1G2z5A 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. A safety interlock can be implemented via a rear panel connector.

The 250S1G2z5A, when used with a sweep generator, will provide a minimum of 250 watts of RF power. Included is a front panel gain control which permits the operator to conveniently set the desired output level. The 250S1G2z5A 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.

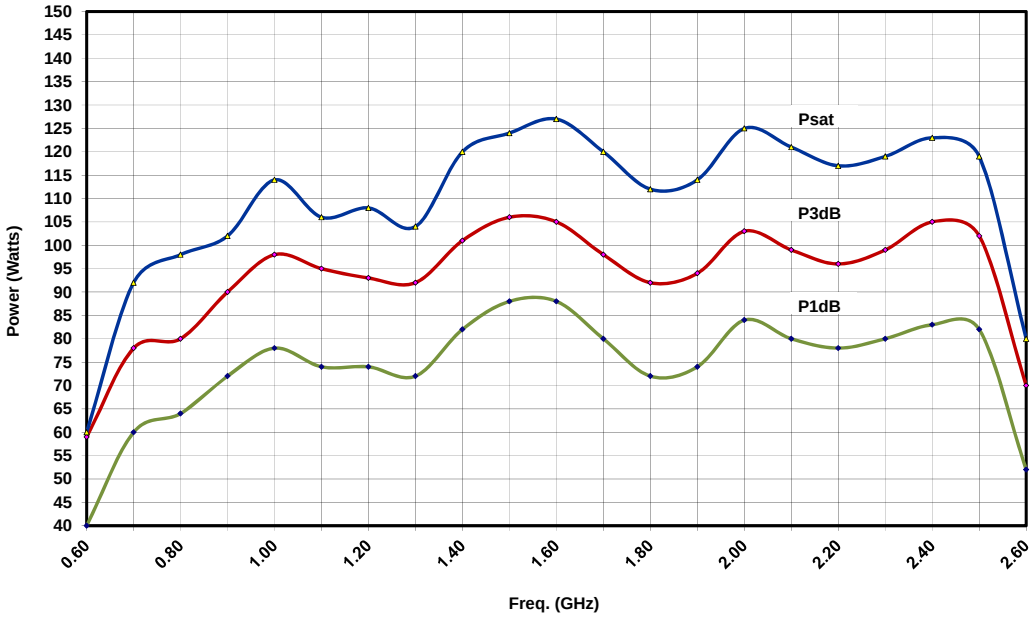
The Model 250S1G2z5A is equipped with a Digital Control Panel (DCP) which provides both local and remote control of the amplifier. The DCP uses a color LCD touch screen and a single rotary knob to offer status reporting and control capability. The display provides Forward Power and Reflected Power values 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 BUS interface connector is located on the back panel and positive control of local or remote operation is assured by a key-lock on the front panel of the amplifier.

The low level of spurious signals and linearity of the Model 250S1G2z5A 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 250S1G2z5A 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

Specifications

250S1G2z5A

- 250 Watts CW
- 1.0-2.5GHz

RATED OUTPUT POWER: 250 watts minimum

INPUT FOR RATED OUTPUT: 1.0 milliwatt maximum

POWER OUTPUT @ 3dB COMPRESSION: Nominal, 275 watts; Minimum, 225 watts

POWER OUTPUT @ 1dB COMPRESSION: Nominal, 200 watts; Minimum, 175 watts

FLATNESS: ±1.5 dB typical, ±2.0 dB maximum

FREQUENCY RESPONSE: 1.0-2.5GHz instantaneously

GAIN (at maximum setting): 54 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: 64 dBm typical

NOISE FIGURE: 10 dB typical

HARMONIC DISTORTION: Minus 20 dBc maximum at 175 watts

SPURIOUS: Minus 73 dBc typical

PHASE LINEARITY: ±1 deg/100 MHz, Typical

PRIMARY POWER: 90-264 VAC, 50/60 Hz, single phase, 1300 watts maximum

CONNECTORS:

RF Input	Type N female
Safety intlk	15 pin subminiature D
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	RF INPUT	RF OUTPUT	WEIGHT	SIZE (W x H x D)
250S1G2z5A	N female, front	N female, front	40.8 kg (90 lbs)	50.3 x 30 x 61 cm 19.8 x 11.8 x 24 in
250S1G2z5AM1	N female, rear	N female, rear	40.8 kg (90 lbs)	50.3 x 30 x 61 cm 19.8 x 11.8 x 24 in
250S1G2z5AM2	Same as 250S1G2z5A with enclosure removed for rack mounting		30 kg (66 lbs)	50.3 x 26.7 x 61 cm 19.8 x 10.5 x 24 in
250S1G2z5AM3	Same as 250S1G2z5AM1 with enclosure removed for rack mounting		30 kg (66 lbs)	50.3 x 26.7 x 61 cm 19.8 x 10.5 x 24 in