

Features

52581G4A

- 525 Watts CW
- 0.8-4.2GHz

The Model 525S1G4A is a portable, selfcontained, air-cooled, broadband, completely solid-state amplifier designed for applications where instantaneous bandwidth, high gain and linearity are required. Push-pull circuitry is utilized in all high power stages in the interest

> of lowering distortion and improving stability. The Model 525S1G4A, when used with a sweep generator, will provide a minimum of 525 watts of RF power.

The Model 525S1G4A 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 re-

motely in GPIB/IEEE-488 format, RS232 hardwire and fiber optic, USB and Ethernet. The

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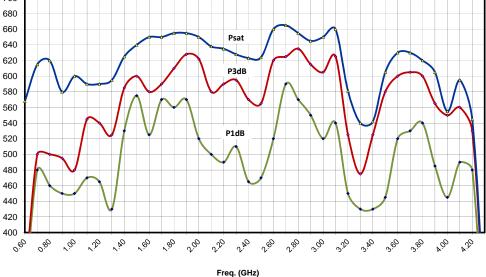
buss interface connector is located on the back panel and positive control of local or remote operation is assured by a keylock on the front panel of the amplifier.

The low level of spurious signals and linearity of the Model 525S1G4A 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.

Psat 640 620 P3dB 600 580 ^oower (Watts) 560 540 P1dB 520 500 480 460 440 420 400 80 0 2 10 0 00 20 °60

Model 525S1G4A TYPICAL POWER OUTPUT



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For an applications engineer call:800.933.8181

www.arworld.us



Specifications

52581G4A

525 Watts CW

0.8-4.2GHz

RATED OUTPUT POWER: 525 watts minimum

INPUT FOR RATED OUTPUT: 1.0 milliwatt maximum

POWER OUTPUT @ 3dB COMPRESSION: Nominal, 525 watts; Minimum, 475 watts

POWER OUTPUT @ 1dB COMPRESSION: Nominal, 450 watts; Minimum, 400 watts

FLATNESS: ±2.0 dB typical, ±2.5 dB maximum

FREQUENCY RESPONSE: 0.8-4.2GHz instantaneously

GAIN (at maximum setting): 57.2 dB minimum

GAIN ADJUSTMENT: 15 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.

HARMONIC DISTORTION: Minus 20 dBc maximum at 500 watts

THIRD ORDER INTERCEPT POINT: 66 dBm typical

RF POWER DISPLAY: Digital, forward and reflected

PRIMARY POWER: 240 VAC, 50/60 Hz, single phase, 3000 watts

Model Configurations

| Model | Description |
|-------------|----------------------------------|
| 525\$1G4AM1 | See separate Specification Sheet |

To order AR Products, call 215.723.8181. For an applications engineer call:800.933.8181. Direct to Service call: 215.723.0275 or email: service@arworld.us For Faxing Orders:866.859.0582 (Orders Only Please) info@arworld.us Approved for public release by AR RF/Microwave Instrumentation

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 | Туре В | |
| Ethernet | RĴ-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: 136 kg (300 lbs)

SIZE (W x H x D): 50.3 x 127 x 61 cm (19.8 x 50 x 24 in)

EXPORT CLASSIFICATION: 3A001