



**Model 525S1G4**  
**525 Watts CW**  
**0.8-4.2GHz**

The Model 525S1G4 is a portable, self-contained, 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 525S1G4, when used with a sweep generator, will provide a minimum of 525 watts of RF power.

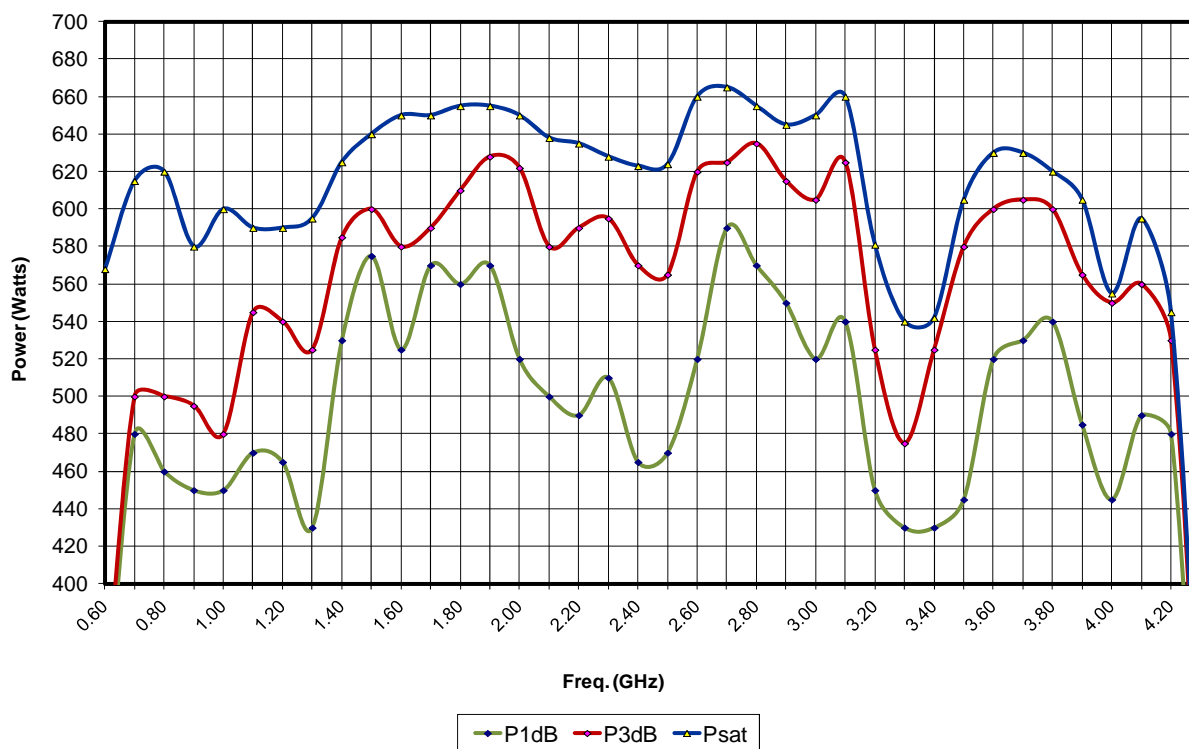
The Model 525S1G4 is equipped with a Digital Control Panel (DCP) which provides both local and remote control of the amplifier. The DCP uses a graphic liquid crystal display, menu assigned softkeys, a single rotary knob, and four dedicated switches (POWER, STANDBY, OPERATE and FAULT/RESET) to offer extensive control and status reporting capability. The display provides operational presentation of Forward Power and Reflected Power plus control status and reports of internal 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, 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 switch on the front panel of the amplifier.

The low level of spurious signals and linearity of the Model 525S1G4 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 525S1G4 Typical Power Output**



## SPECIFICATIONS, MODEL 525S1G4

|   |  |
|---|--|
| 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<br>±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.<br>*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 .....                           | 200-260VAC<br>50/60 Hz, single phase<br>3000 watts   |
| CONNECTORS                                    |  |
| RF Input.....                                 | Type N female on rear panel  |
| RF Output.....                                | Type 7/8 EIA female on rear panel  |
| Safety interlock .....                        | 15 pin female subminiature D on rear panel   |
| Remote computer interface .....               | IEEE-488 (GPIB)& RS-232 connector on rear panel  |
| Remote Computer Interface (Fiber Optic) ..... | ST Conn Tx and Rx RS-232   |
| 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 .....                                  | 118 kg (260 lbs)   |
| SIZE (W x H x D) .....                        | 50.3 x 127 x 61 cm (19.8 x 50 x 24 in)   |
| EXPORT CLASSIFICATION.....                    | 3A001  |