



700S1G4A

- 700 Watts CW
- 0.8-4.2GHz



Features

The Model 700S1G4A 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 700S1G4A, when used with a sweep generator, will provide a minimum of 700 watts of RF power.

The Model 700S1G4A 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.

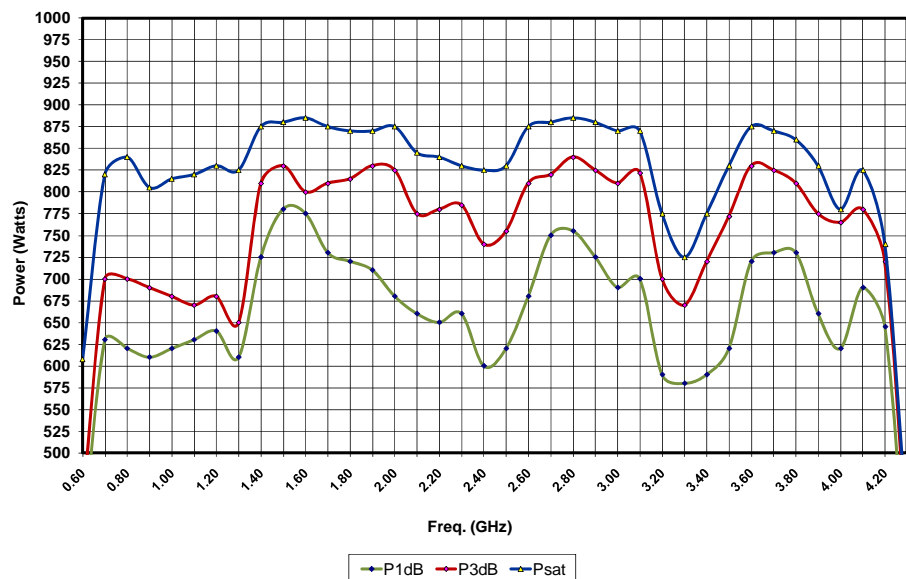
All amplifier control functions and status indications are available remotely in GPIB/IEEE-488 format, RS232 hardwire and

fiber optic, USB and Ethernet. The 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 700S1G4A 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 700S1G4A 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



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Specifications

RATED OUTPUT POWER: 700 watts minimum

INPUT FOR RATED OUTPUT: 1.0 milliwatt maximum

POWER OUTPUT @ 3dB COMPRESSION: Nominal, 700 watts; Minimum, 625 watts

POWER OUTPUT @ 1dB COMPRESSION: Nominal, 600 watts; Minimum, 525 watts

FLATNESS: ± 1.5 dB typical; ± 2.0 dB maximum

FREQUENCY RESPONSE: 0.8-4.2GHz instantaneously

GAIN (at maximum setting): 59 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 700 watts

THIRD ORDER INTERCEPT POINT: 67 dBm typical

RF POWER DISPLAY: Digital, forward and reflected

PRIMARY POWER: 200-260VAC, 50/60 Hz, single phase, 3800 watts

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	Type B
Ethernet	RJ-45

IEEE-488 (GPIB) INTERFACE & RS-232: Allows control and monitoring of all front panel controls except key-lock position control

COOLING: Forced air (self contained fans)

WEIGHT: 124.8 kg (275 lbs)

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

EXPORT CLASSIFICATION: 3A001