



**Model 1200S1G4,  
1200 Watts CW  
0.8GHz–4.2GHz**

The Model 1200S1G4 is a portable, self-contained, air-cooled, broadband, completely solid-state amplifier designed for applications where instantaneous bandwidth, high gain and linearity are required. The Model 1200S1G4, when used with a sweep generator, will provide a minimum of 1200 watts of RF power instantaneously from 0.8 to 4.2 GHz.

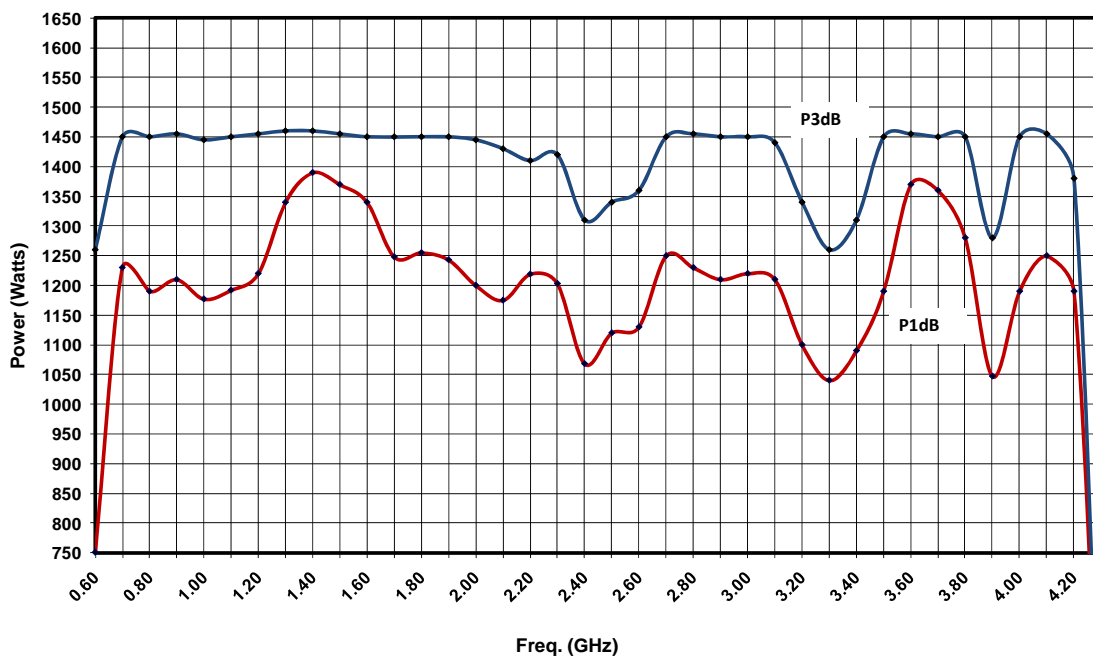
The Model 1200S1G4 is equipped with a Digital Control Panel (DCP) which provides both local and remote control of the amplifier. The DCP uses a graphic Liquid Crystal Display, menu assigned softkeys, a single rotary knob, and a dedicated power on/off switch to offer extensive control and status reporting 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 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 Model 1200S1G4 is designed to have low spurious signals, linearity and is extremely load tolerant which enables it to be used in many RF applications such as: RF susceptibility testing, antenna/component testing, and communication technology testing. 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, UWB, WiMAX etc.

The 1200S1G4 is part of AR's Expandable Power concept, which gives the amplifier much more versatility. The 1200S1G4 consists of four 350S1G4 sub-amplifiers housed in a single equipment rack with a controller. The 1200S1G4 can function as one amplifier or be separated and operate as four separate 350S1G4 amplifiers which can be used independently.

1200 Typical Power Output



## SPECIFICATIONS, MODEL 1200S1G4

RATED OUTPUT POWER .....	0.8–4.2GHz: 1200 watts minimum
INPUT FOR RATED OUTPUT .....	1.0 milliwatt maximum
POWER OUTPUT @ 3 dB COMPRESSION	
Nominal .....	1350 watts
Minimum .....	1150 watts
POWER OUTPUT @ 1 dB COMPRESSION	
Nominal .....	1150 watts
Minimum .....	950 watts
FLATNESS .....	±2.5 dB maximum
FREQUENCY RESPONSE .....	0.8–4.2 GHz instantaneously
GAIN (at maximum setting) .....	60.8 dB minimum
GAIN ADJUSTMENT .....	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
HARMONIC DISTORTION .....	Minus 20 dBc maximum at 1000 watts
THIRD ORDER INTERCEPT POINT .....	69 dBm typical
RF POWER DISPLAY .....	Digital, forward and reflected
PRIMARY POWER .....	100-240 VAC 50/60 Hz, single phase 8200 watts
CONNECTORS	
RF input .....	Type N female on front panel
RF output .....	Type 7/8 EIA on rear panel
Remote Interfaces	
IEEE-488 .....	24 pin
RS-232 .....	9-pin sub-D
RS-232 (fiber-optic) .....	Type ST
USB 2.0 .....	Type B
Ethernet .....	RJ-45
Safety Interlock .....	15 pin female subminiature D on rear panel
COOLING .....	Forced air (self contained fans) enters front and bottom
WEIGHT (approximate) .....	400 kg (880 lbs)
SIZE (W x H x D) (2 cabinets) .....	56.1 x 173 x 82.3 cm (22.1 x 68.0 x 32.4 in)