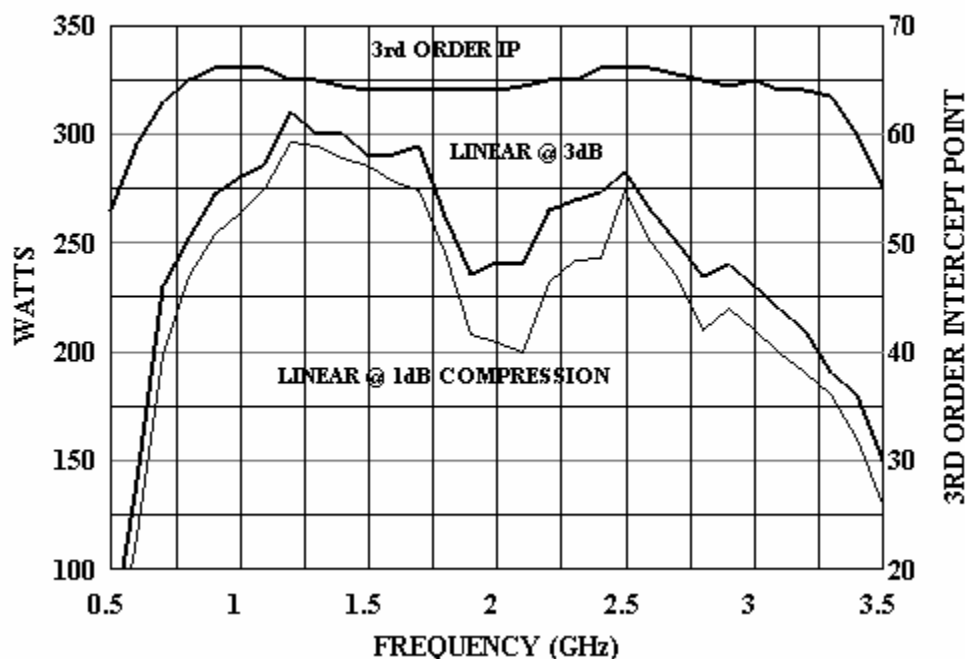


The Model 240S1G3 is a portable, self-contained, air-cooled, broadband, completely solid-state amplifier designed for applications where instantaneous bandwidth, high gain and linearity are required. Push-pull circuitry is utilized in all high power stages in the interest of lowering distortion and improving stability. The Model 240S1G3, when used with a sweep generator, will provide a minimum of 240 watts of RF power.

The Model 240S1G3 is equipped with a Digital Control Panel (DCP) which provides both local and remote control of the amplifier. The DCP uses a digital 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, internal/external automatic level control (ALC) with front panel control of the ALC threshold, pulse input capability and RF output level protection. Also included is an internal RF detector that provides an output for use in self-testing or operational modes.

All amplifier control functions and status indications are available remotely in GPIB / IEEE-488 format and RS-232 hardware and fiber optic. 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 240S1G3 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.

240S1G3 TYPICAL POWER OUTPUT

SPECIFICATIONS

Model 240S1G3

RATED OUTPUT POWER.....	0.8 – 1 GHz: 230 watts minimum 1 – 3 GHz: 240 watts minimum
INPUT FOR RATED OUTPUT.....	1.0 milliwatt maximum
POWER OUTPUT @ 3 dB COMPRESSION	
Nominal.....	250 watts
Minimum.....	200 watts
POWER OUTPUT @ 1 dB COMPRESSION	
Nominal.....	230 watts
Minimum.....	180 watts
FLATNESS.....	±2.5 dB maximum ±1.0 dB with internal leveling
FREQUENCY RESPONSE.....	0.8-3.0 GHz instantaneously
GAIN (at maximum setting).....	54 dB minimum
GAIN ADJUSTMENT.....	15 dB minimum
INPUT IMPEDANCE.....	50 ohms, VSWR 2.0:1 maximum
OUTPUT IMPEDANCE.....	50 ohms, VSWR 2.5:1 maximum
MISMATCH TOLERANCE *.....	100% of rated power without foldback. Will operate without damage or oscillation with any magnitude and phase of source and load impedance.
MODULATION CAPABILITY.....	Will faithfully reproduce AM, FM, or pulse modulation appearing on the input signal
HARMONIC DISTORTION.....	Minus 20 dBc maximum at 200 watts
THIRD ORDER INTERCEPT POINT.....	65 dBm typical
RF POWER DISPLAY.....	Digital, forward and reflected
PRIMARY POWER.....	120-240VAC 50/60 Hz, single phase 2150 watts
CONNECTORS	
RF connectors.....	See Model Configurations
Detected RF output.....	Front 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
Others.....	Front Panel
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)

***See Application Note #27**

MODEL CONFIGURATIONS

MODEL NUMBER	RF INPUT	RF OUTPUT	WEIGHT	SIZE (W x H x D)
240S1G3	<i>Type N female on front panel</i>	<i>Type N female on front panel</i>	172.4 kg (380 lbs)	56.1 x 109 x 67.1 cm (22.1 x 43.0 x 26.4 in)
240S1G3M1	<i>Type N female on rear panel</i>	<i>Type N female on rear panel</i>	172.4 kg (380 lbs)	56.1 x 109 x 67.1 cm (22.1 x 43.0 x 26.4 in)
240S1G3M2	<i>Type N female on rear panel</i>	<i>Type N female on rear panel</i>	184 kg (405 lbs)	56 x 138 x 67.1 cm (22 x 54.3 x 26.4 in)
	<i>Mounted in a taller cabinet to allow space for customer supplied equipment to be mounted</i>			