## rf/microwave instrumentation



Model 35051G4, M1 through M4 350 Watts CW 0.8-4.2GHz

The Model 350S1G4 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 350S1G4, when used with a sweep generator, will provide a minimum of 350 watts of RF power.

The Model 350S1G4 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 350S1G4 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 350S1G4 is housed in a single equipment rack and is designed to provide complete standalone performance for RF testing. It is also configured to be used as a sub-amplifier in a 600-watt, 900-watt, or 1200-watt higher power amplifier. It can be added to in an incremental fashion to become a part of these higher power units, yet still be used as a standalone 350 watt amplifier.



## SPECIFICATIONS, MODEL 350S1G4

RATED OUTPUT	POWER			
INPUT FOR RATE	D OUTPUT	1.0 milliwatt maximum		
POWER OUTPUT Nominal Minimum	@ 3dB COMPRESSION			
POWER OUTPUT Nominal Minimum	@ 1dB COMPRESSION			
FLATNESS		±2.0 dB typical ±2.5 dB maximum		
FREQUENCY RESPONSE		0.8-4.2GHz instantaneously		
GAIN (at maximum setting)		55.5 dB minimum		
GAIN ADJUSTMENT				
INPUT IMPEDANCE		50 ohms, VSWR 2.0:1 maximum		
OUTPUT IMPEDANCE				
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 DIST	TORTION		watts	
THIRD ORDER INTERCEPT POINT		65 dBm typical		
RF POWER DISPLAY		Digital, forward and reflected		
PRIMARY POWER		120-240VAC 50/60 Hz, single phase 1900 watts		
CONNECTORS RF Connector Safety interlo Remote com Remote Com Operate Inter USB 2.0 Ethernet	ors ock puter interface nputer Interface (Fiber Optic) orface.	See Model Configurations 15 pin female subminiature D c IEEE-488 (GPIB)& RS-232 conne ST Conn Tx and Rx RS-232 RJ-11 on rear panel Type B Type B	on rear panel ector on rear panel	
IEEE-488 (GPIB)	INTERFACE & RS-232	Allows control and monitoring control	of all front panel cont	rols except keylock position
COOLING				
		MODEL CONFIGURATIONS		
MODEL #	RF INPUT	RF OUTPUT	WEIGHT	SIZE (W x H x D)
350\$1G4	Type N female on front panel	Type 7/16 female on front panel	86.2 kg (190 lbs)	50.3 x 55.9 x 61 cm 19.8 x 22 x 24 in
350\$1G4M1	Type N female on rear panel	Type 7/16 female on rear panel	86.2 kg (190 lbs)	50.3 x 55.9 x 61 cm 19.8 x 22 x 24 in
350\$1G4M2	Same as standard with enclosure removed for rack mounting.		68 kg (130 lbs)	48.3 x 53.3 x 61 cm 19 x 21 x 24 in
350\$1G4M3	Same as M1 with enclosur	re removed for rack mounting.	68 kg (130 lbs)	48.3 x 53.3 x 61 cm 19 x 21 x 24 in