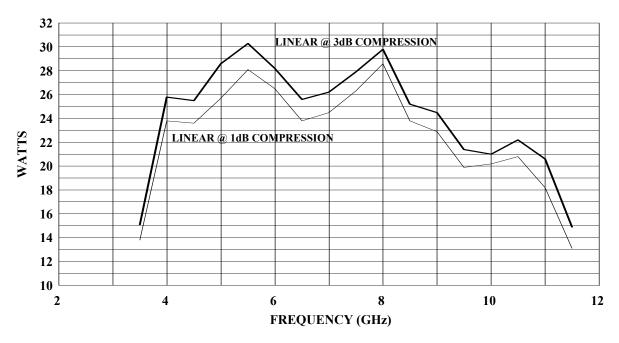


MODEL 20S4G11, M1, M2, M3 20 WATTS CW 4.0 – 10.6 GHZ

The Model 20S4G11 is a solid state, self-contained, air-cooled, broadband amplifier designed for applications where instantaneous bandwidth and high gain are required. Housed in a stylish contemporary cabinet, the unit is designed for benchtop use, but can be removed from the cabinet for immediate equipment rack mounting. The 20S4G11, when used with a sweep generator, will provide a minimum of 20 watts of RF power. Included is a front panel gain control which permits the operator to conveniently set the desired output level. The 20S4G11 is protected from RF input overdrive by an RF input leveling circuit which controls the RF input level to the RF amplifier first stage when the RF input level is increased above 0 dBm. The RF amplifier stages are protected from over temperature by removing the DC voltage to them if an over temperature condition occurs due to cooling blockage or fan failure. There is a digital display on the front panel to indicate the operate status and fault conditions when an overtemperature or power supply fault has occurred. The unit can be returned to operate when the condition has been cleared. The 20S4G11 includes digital control for both local and remote control of the amplifier. This 8-bit RISC microprocessor controlled board provides both IEEE-488 (GPIB) and asynchronous, full duplex RS-232 control of all amplifier functions.

## 20S4G11 TYPICAL POWER OUTPUT



## SPECIFICATIONS Model 20S4G11

RATED POWER OUTPUT	20 watts minimum
POWER OUTPUT @ 3dB COMPRESSION  Nominal	
POWER OUTPUT @ 1dB COMPRESSION Nominal	
FLATNESS	±2.0 dB typical ±3.0 dB maximum
FREQUENCY RESPONSE	4.0 – 10.6 GHz instantaneously
INPUT FOR RATE OUTPUT	1.0 milliwatt maximum, 0 dBm
GAIN (at maximum setting)	43 dB minimum
GAIN ADJUSTMENT (Continuous Range)	10 dB minimum
INPUT IMPEDANCE	50 ohms, VSWR 2.5:1 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.
MODULATION CAPABILITY	Will faithfully reproduce AM, FM, or pulse modulation appearing on the input signal
HARMONIC DISTORTION	Minus 20 dBc maximum at 20 watts
THIRD ORDER INTERCEPT POINT	52 dBm typical
PRIMARY POWER (selected automatically)	90-132, 180-264 VAC 50/60 Hz, single phase <550 watts maximum
CONNECTORS	50/60 Hz, single phase <550 watts maximum
CONNECTORS RF	50/60 Hz, single phase <550 watts maximum
CONNECTORS	50/60 Hz, single phase <550 watts maximum Type N female

## **OPTIONAL CONFIGURATIONS**

COOLING......Forced air (self contained fans)

MODEL NUMBER	RF INPUT	RF OUTPUT	WEIGHT	SIZE (W x H x D)		
20\$4G11	Type N female on front panel	Type N female on front panel	40 kg (89 lbs)	50.3 x 24.9 x 54.6 cm 19.8 x 9.8 x 21.5 in		
20\$4G11M1	Type N female on rear panel	Type N female on rear panel	40 kg (89 lbs)	50.3 x 24.9 x 54.6 cm 19.8 x 9.8 x 21.5 in		
20\$4G11M2	Same as 20S4G11 with enclosure removed for rack mounting		27 kg (60 lbs)	48.3 x 22.2 x 54.6 cm 19 x 8.75 x 21.5 in		
20\$4G11M3	Same as 20S4G11M1 with enclosure removed for rack mounting		27 kg (60 lbs)	48.3 x 22.2 x 54.6 cm 19 x 8.75 x 21.5 in		