

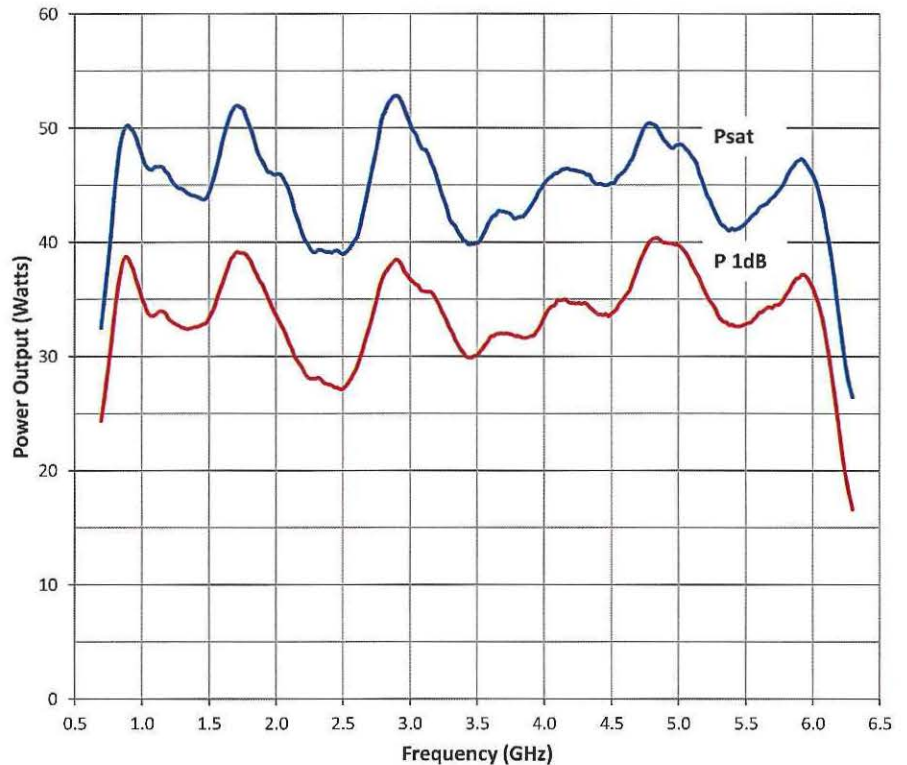
Model 25S1G6
M1 through M3
25 Watts CW
0.7GHz-6GHz



The Model 25S1G6 is a solid-state, Class A design, 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 25S1G6, when used with a sweep generator, will provide a minimum of 25 watts of RF power. Included is a front panel gain control which permits the operator to conveniently set the desired

output level. The 25S1G6 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 over-temperature or power supply fault has occurred. The unit can be returned to operate when the condition has been cleared. The 25S1G6 includes digital control for both local and remote control of the amplifier. All amplifier control functions and status indications are available remotely in GPIB/IEEE-488 format, RS-232 hardware 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.

25S1G6 Typical Power Output



The export classification for this equipment is EAR99. 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.

SPECIFICATIONS, MODEL 25S1G6

RATED POWER OUTPUT	25 watts minimum (0.7-6GHz)
POWER OUTPUT @ 3dB COMPRESSION	
Nominal	35 watts
Minimum	25 watts
POWER OUTPUT @ 1dB COMPRESSION	
Nominal	30 watts
Minimum	20 watts
SMALL SIGNAL GAIN FLATNESS.....	±1.5 dB typical ±2.0 dB maximum
FREQUENCY RESPONSE	0.7–6GHz instantaneously
INPUT FOR RATED OUTPUT	1.0 milliwatt maximum
GAIN (at maximum setting)	44 dB minimum
GAIN ADJUSTMENT (Continuous Range)	10 dB minimum (4096 steps remote)
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 25 watts (1-6GHz) Minus 15 dBc typical at 25 watts (0.7-1GHz)
SPURIOUS	Minus 73 dBc typical
THIRD ORDER INTERCEPT POINT	50 dBm typical
NOISE FIGURE	10 dB typical
PRIMARY POWER (selected automatically).....	90-132, 180-264 VAC 50/60 Hz, single phase 300 watts maximum
CONNECTORS	
RF.....	Type N female
REMOTE INTERFACES	
IEEE-488.....	24 pin female
RS-232	9 pin Subminiature D (female)
RS-232 (fiber optic)	Type ST
USB 2.0	Type B
Ethernet	RJ-45
SAFETY INTERLOCK	15 Pin Subminiature D
COOLING.....	Forced air (self contained fans)
EXPORT CLASSIFICATION	EAR99

MODEL	RF INPUT	OPTIONAL CONFIGURATIONS		WEIGHT	SIZE (W x H x D)
		RF OUTPUT			
25S1G6	Type N female on front panel	Type N female on front panel		18.2 kg (40 lbs)	50.3 x 15.5 x 37.6 cm 19.8 x 6.1 x 14.8 in
25S1G6M1	Type N female on rear panel	Type N female on rear panel		18.2 kg (40 lbs)	50.3 x 15.5 x 37.6 cm 19.8 x 6.1 x 14.8 in
25S1G6M2	Same as 15S1G6 with enclosure removed for rack mounting			12.5 kg (27.5 lbs)	48.3 x 12.7 x 37.6 cm 19.0 x 5.0 x 14.8 in
25S1G6M3	Same as 25S1G6M1 with enclosure removed for rack mounting			12.5 kg (27.5 lbs)	48.3 x 12.7 x 37.6 cm 19.0 x 5.0 x 14.8 in

Model 200S1G6
M1 through M3
200 Watts CW
0.7GHz-6GHz



The Model 200S1G6 is a solid-state, Class A design, self-contained, air-cooled, broadband amplifier designed for applications where instantaneous bandwidth, high gain and linearity 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.

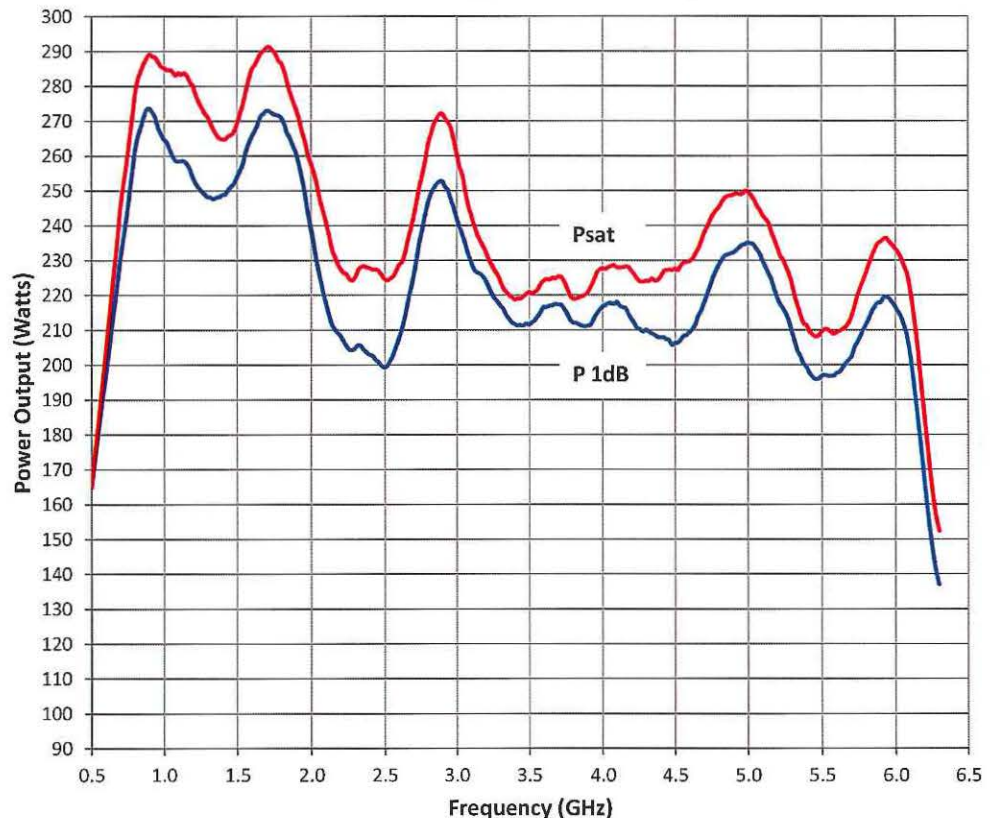
The 200S1G6, when used with a sweep generator, will provide a minimum of 200 watts of RF power. Included is a front panel gain control which permits the operator to conveniently set the desired output level. The 200S1G6 is protected from RF input overdrive by an RF input leveling circuit which controls 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 if an over-temperature or power supply fault has occurred. The unit can be returned to operate when the condition has been cleared. 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 200S1G6 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.

200S1G6 Typical Power Output



SPECIFICATIONS, MODEL 200S1G6

RATED POWER OUTPUT	200 watts minimum (0.7–6.0 GHz)
INPUT FOR RATED OUTPUT	1.0 milliwatt maximum
POWER OUTPUT @ 3dB COMPRESSION	
Nominal	220 watts
Minimum	180 watts
POWER OUTPUT @ 1dB COMPRESSION	
Nominal	180 watts
Minimum	160 watts
SMALL SIGNAL GAIN FLATNESS.....	±1.5 dB typical ±2.5 dB maximum
FREQUENCY RESPONSE	0.7–6 GHz instantaneously
GAIN (at maximum setting)	54 dB minimum
GAIN ADJUSTMENT	
(Continuous Range).....	10 dB minimum
(4096 steps remote)	
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
THIRD ORDER INTERCEPT	60 dBm typical
NOISE FIGURE	10 dB typical
HARMONIC DISTORTION.....	Minus 20 dBc maximum at 180 watts, (1.0-6.0 GHz) Minus 15 dBc typical at 180 watts, (0.7–1.0 GHz)
SPURIOUS	Minus 73 dBc Typ.
PHASE LINEARITY.....	±1.0 deg/100 MHz, Typ
PRIMARY POWER (Selected Automatically)	90-132, 180-264 VAC 50/60 Hz, single phase 1900 watts maximum
CONNECTORS	
RF.....	Type N female
REMOTE INTERFACES	
IEEE-488.....	24 pin
RS-232	9 pin Subminiature D
RS-232 (fiber optic)	Type ST
USB 2.0	Type B
Ethernet	RJ-45
SAFETY INTERLOCK.....	15 pin Subminiature D
COOLING.....	Forced air (self contained fans)
EXPORT CLASSIFICATION	3A001

MODEL CONFIGURATIONS				
MODEL	RF INPUT	RF OUTPUT	WEIGHT	SIZE (W x H x D)
200S1G6	Type N female, front panel	Type N female, front panel	86.2 kg (190 lbs)	50.3 x 55.9 x 61 cm 19.8 x 22 x 24 in
200S1G6M1	Type N female, rear panel	Type N female, rear panel	86.2 kg (190 lbs)	50.3 x 55.9 x 61 cm 19.8 x 22 x 24 in
200S1G6M2	Same as 200S1G6 with enclosure removed for rack mounting		68 kg (130 lbs)	48.3 x 53.3 x 61 cm 19.0 x 21 x 24 in
200S1G6M3	Same as 200S1G6M1 with enclosure removed for rack mounting		68 kg (130 lbs)	48.3 x 53.3 x 61 cm 19.0 x 21 x 24 in