



40S6G18-L

- 40 Watts CW
- 6GHz-18GHz

Features

The Model 40S6G18-L is a portable, self-contained, liquid-cooled, broadband, Class A solid-state amplifier designed for applications where instantaneous bandwidth, high gain and linearity are required. The Model 40S6G18-L, when used with a sweep generator, will provide a minimum of 40 watts of RF power instantaneously from 6 to 18 GHz.

The Model 40S6G18-L is equipped with a Digital Control Panel (DCP) which provides both local and remote control of the amplifier. The DCP uses a color LCD touch screen display to indicate the operate status and fault conditions if an overtemperature or power supply fault has occurred. The unit can be returned to operate when the condition has been cleared. Special features include a gain control and input overdrive protection.

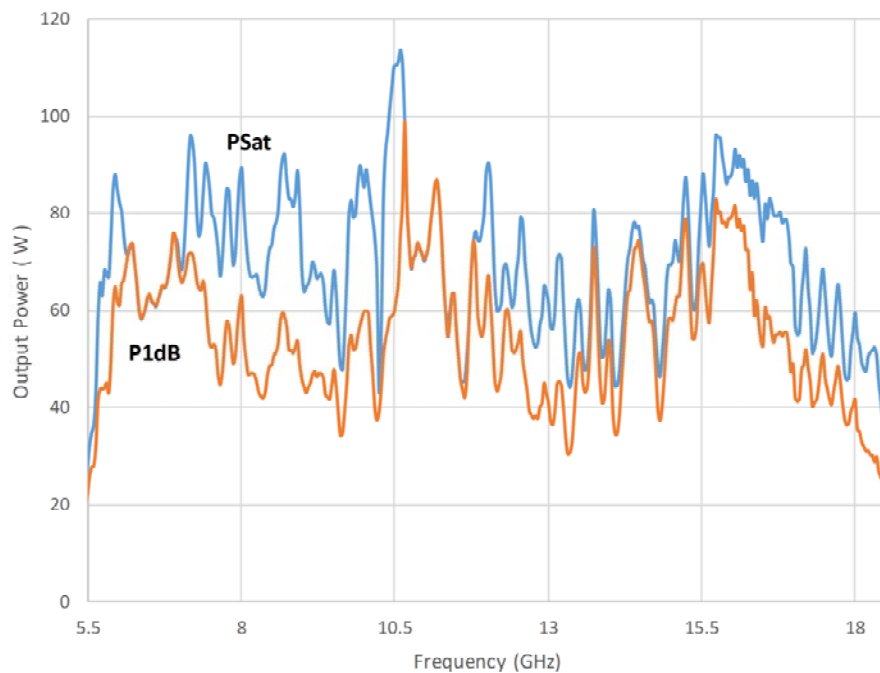
All amplifier control functions and status indications are available remotely in GPIB/IEEE-488 format, RS-232 hardwire and fiber optic,

USB, and Ethernet. The buss interface ports are located on the back panel and positive control of local or remote operation is via the front panel of the amplifier.

The Model 40S6G18-L 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 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.

40S6G18-L Typical Output Power



AR RF/Microwave
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Specifications

RATED POWER OUTPUT: 40 watts minimum

POWER OUTPUT @ 3dB COMPRESSION:
 Nominal: 45 watts
 Minimum: 35 watts

POWER OUTPUT @ 1dB COMPRESSION:
 Nominal: 30 watts
 Minimum: 22 watts

POWER GAIN FLATNESS (0 dBm IN):
 ±2.0 dB typical; ±3.0 dB maximum

FREQUENCY RESPONSE: 6–18 GHz instantaneously

INPUT FOR RATED OUTPUT: 1.0 milliwatt maximum, 0 dBm

POWER GAIN (at maximum setting): 46 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 40 watts

THIRD ORDER INTERCEPT POINT: 52 dBm typical

PRIMARY POWER (selected automatically):
 90-132, 180-264 VAC; 50/60 Hz, single phase;
 < 1000 watts maximum

CONNECTORS:
RF INPUT & OUTPUT: See Model Configurations

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

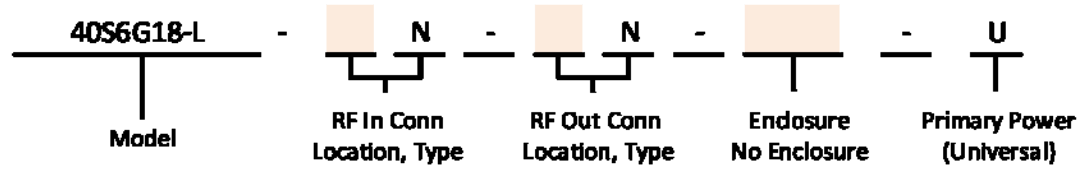
SIZE (HxWxD):
 w/cabinet: 50.3 x 20.6 x 62.2 cm; 19.8 x 8.1 x 24.5 in
 w/o cabinet: 48.3 x 17.8 x 62.2 cm; 19.0 x 7.0 x 24.5 in

WEIGHT:
 w/cabinet: 34 kg; 75 lbs
 w/o cabinet: 22.7 kg; 50 lbs

COOLING: Forced air (internal self-contained liquid)

ENVIRONMENTAL:
 Operating Temperature: 5°C / +40°C
 Operating Altitude: Up to 2000M
 Storage Temperature: -10°C / +60°C
 Shock and vibration: Normal Truck Transport

EXPORT CLASSIFICATION: 3A001



CONNECTOR LOCATION		ENCLOSURE	
Front	F	Enclosure	E
Rear	R	No Enclosure	NE