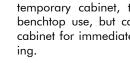


# 100S1G6AB

- M1-M4
- 100 Watts CW
- 1GHz-6GHz



Features

band 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 mount-

The Model 100S1G6AB is a solid-state, Class

AB design, self-contained, air-cooled, broad-

The 100S1G6AB, when used with a sweep

generator, will provide a minimum of 100 watts of RF power. Included is a front panel gain control which permits the operator to conveniently set the desired out-

put level. The 100S1G6AB 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 overtemperature 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 overtemperature 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 100S1G6AB 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.

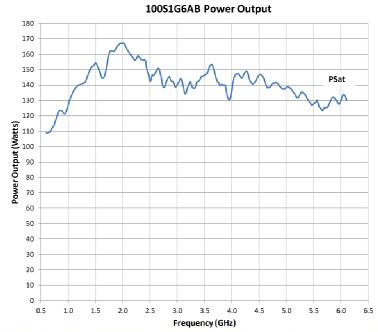
The export classification for this equipment is 3A001. These commodities, technology or software are controlled for export in accordance with the U.S. Export Administration Regulations. Diversion contrary to U.S. law is prohibited.

# AR RF/Microwave Instrumentation

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## 100S1G6AB

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# RATED POWER OUTPUT: 100 watts minimum (1.0-6

**INPUT FOR RATED OUTPUT:** 1.0 milliwatt maximum

**SMALL SIGNAL GAIN FLATNESS:** ±1.5 dB typical;

±2.5 dB maximum

**Specifications** 

GHz)

FREQUENCY RESPONSE: 1.0-6 GHz instantaneously

GAIN (at maximum setting): 50 dB minimum

GAIN ADJUSTMENT: (Continuous Range; 4096 steps

remote) 10 dB minimum

INPUT IMPEDANCE: 50 ohms, VSWR 2.0:1 maximum

**OUTPUT IMPEDANCE:** 50 ohms, nominal

MISMATCH TOLERANCE (@ Rated Pout): Infinite VSWR. 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

THIRD ORDER INTERCEPT: 56 dBm typical

NOISE FIGURE: 10 dB typical

HARMONIC DISTORTION: Minus 15 dBc typical

SPURIOUS: Minus 73 dBc Typ.

PHASE LINEARITY: ±1.0 deg/100 MHz, Typ

PRIMARY POWER (Selected Automatically): 90-132, 180-250VAC; 50/60 Hz, single phase, 525 watts maximum

**CONNECTORS** 

Type N female

**REMOTE INTERFACES:** 

**IEEE-488** 24 pin

RS-232 9 pin Subminiature D

RS-232 (fiber optic) Type ST Type B USB 2.0 RJ-45 Ethernet

SAFETY INTERLOCK: 15 pin Subminiature D **COOLING:** Forced air (self contained fans)

**EXPORT CLASSIFICATION: 3A001** 

### **Model Configurations**

#### **MODEL CONFIGURATIONS**

MODEL	RF INPUT	RF OUTPUT	WEIGHT	SIZE (W x H x D)
100S1G6AB	Type N female, front	Type N female, front	28.4 kg (62.5 lbs)	50.3 x 20.3 x 54.6 cm 19.8 x 8.0 x 21.5 in
100S1G6ABM1	Type N female, rear	Type N female, rear	28.4 kg (62.5 lbs)	50.3 x 20.3 x 54.6 cm 19.8 x 8.0 x 21.5 in
100S1G6ABM2	Same as 100S1G6AB; enclosure removed for rack mounting		20.2 kg (44.5 lbs)	48.3 x 17.8 x 54.6 cm 19.0 x 7.0 x 21.5 in
100\$1G6ABM3	Same as 100S1G6AB for rack mounting	M1; enclosure removed	20.2 kg (44.5 lbs)	48.3 x 17.8 x 54.6 cm 19.0 x 7.0 x 21.5 in
100S1G6ABM4	Type N female, front	Type N female, rear	28.4 kg (62.5 lbs)	50.3 x 20.3 x 54.6 cm 19.8 x 8.0 x 21.5 in