



30/20S1G18B

- 30/20 Watts CW
- 0.7GHz–18GHz

Features

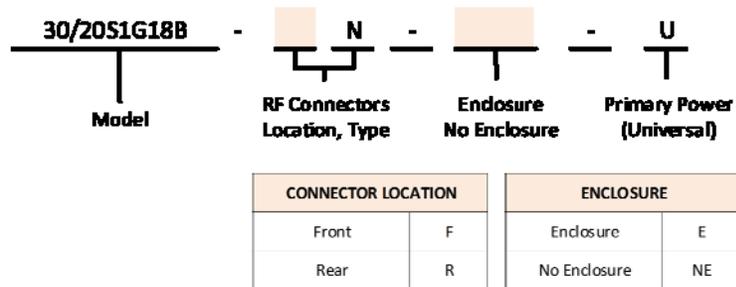
The Model 30/20S1G18B is a portable, self-contained, air-cooled, dual-band, broadband, completely solid-state amplifier designed for applications where instantaneous bandwidth, high gain and linearity are required.

This model is equipped with a Digital Control Panel (DCP) which provides both local and remote control of the amplifier. The digital display on the front panel indicates control status and reports of internal amplifier status. All amplifier control functions and status indications are available remotely in GPIB/IEEE-488 format, RS-232 hardware and fiber optic, USB, and Ethernet.

This model is designed to have low spurious signals, exhibit very good 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 are 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.

Model Configurations



Specifications, General

INPUT FOR RATED OUTPUT: 1.0 milliwatt maximum, 0 dBm

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. See Application Note #27.

MODULATION CAPABILITY: Will faithfully reproduce AM, FM, or pulse modulation appearing on the input signal.

SPURIOUS: Minus 73 dBc typical

CONNECTORS:

See Model Configurations; RF In/Out are on the same panel

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 (internal self-contained liquid)

SIZE (W x H x D):

w/cabinet: 50.3 x 34 x 62.2 cm; 19.8 x 13.4 x 24.5 in
w/o cabinet: 48.3 x 31.2 x 62.2 cm; 19.0 x 12.3 x 24.5 in

WEIGHT:

w/cabinet: 42 kg; 93 lbs
w/o cabinet: 31 kg; 68 lbs

EXPORT CLASSIFICATION: 3A001

AR RF/Microwave
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30/20S1G18B

- 30/20 Watts CW
- 0.7GHz–18GHz

Model 30/20S1G18B, 0.7–6.0GHz Band Selected

RATED POWER OUTPUT: 30 watts minimum

POWER OUTPUT @ 3dB COMPRESSION:

Nominal 35 watts; Minimum 26 watts

POWER OUTPUT @ 1dB COMPRESSION:

Nominal 30 watts; Minimum 22 watts

POWER GAIN FLATNESS (0 dBm IN):

±1.5 dB typical; ±2.0 dB maximum

FREQUENCY RESPONSE: 0.7–6.0 GHz instantaneously

GAIN (at maximum setting): 44 dB minimum

THIRD ORDER INTERCEPT: 50 dBm typical

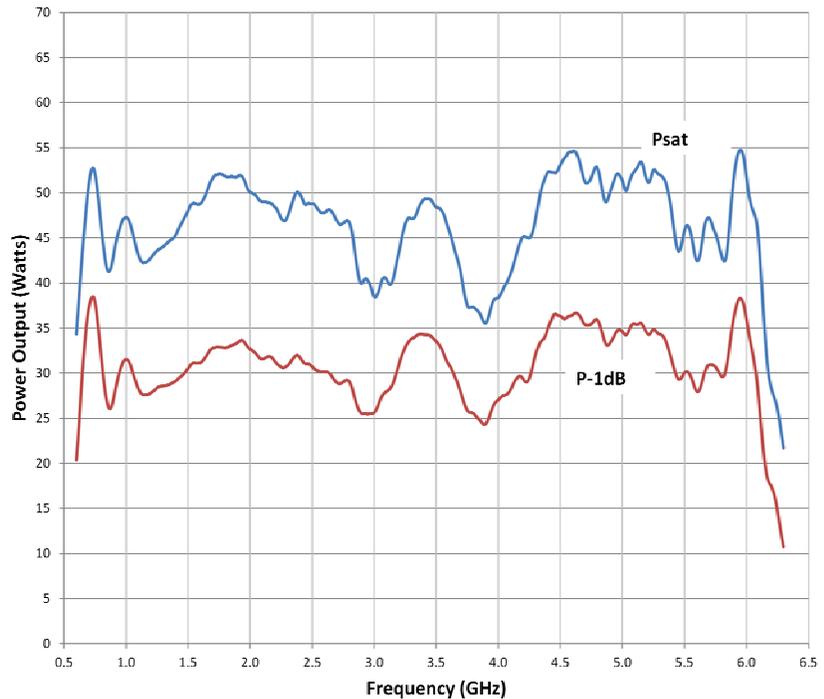
NOISE FIGURE: 10 dB typical

HARMONIC DISTORTION: Minus 20 dbc max at 30 watts (0.7-6.0 GHz)

PRIMARY POWER (Selected Automatically):

90-264 VAC, 50/60 Hz, single phase, 300 watts maximum

30/20S1G18B TYPICAL POWER OUTPUT WITH 0.7-6.0GHz BAND SELECTED



30/20S1G18B

- 30/20 Watts CW
- 0.7GHz–18GHz

Model 30/20S1G18B, 6.0–18GHz Band Selected

RATED POWER OUTPUT: 20 watts minimum

POWER OUTPUT @ 3dB COMPRESSION:
Nominal 25 watts; Minimum 18 watts

POWER OUTPUT @ 1dB COMPRESSION:
Nominal 22 watts; Minimum 15 watts

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

FREQUENCY RESPONSE: 6.0–18 GHz instantaneously

GAIN (at maximum setting): 44 dB minimum

THIRD ORDER INTERCEPT: 49 dBm typical

HARMONIC DISTORTION: Minus 20 dBc max @ 20W (6.0-18 GHz)

PRIMARY POWER (Selected Automatically):
90-264 VAC, 50/60 Hz, single phase, 600 watts maximum

30/20S1G18B TYPICAL POWER OUTPUT WITH 6.0–18.0GHz BAND SELECTED

