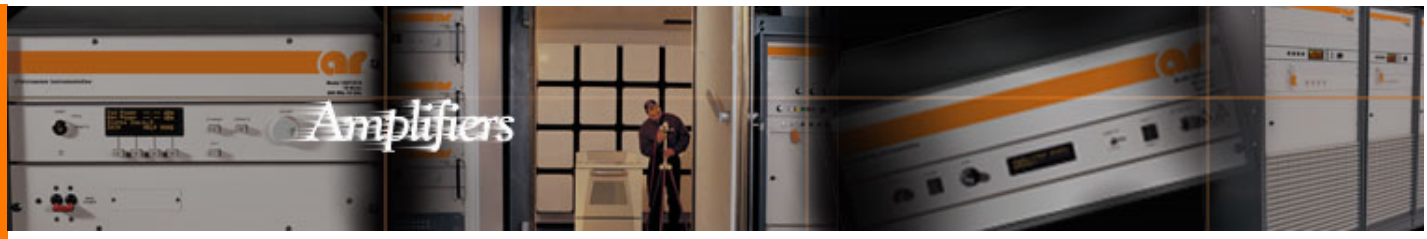


6000W1000

- 6000 Watts CW
- 80MHz–1000MHz

Features

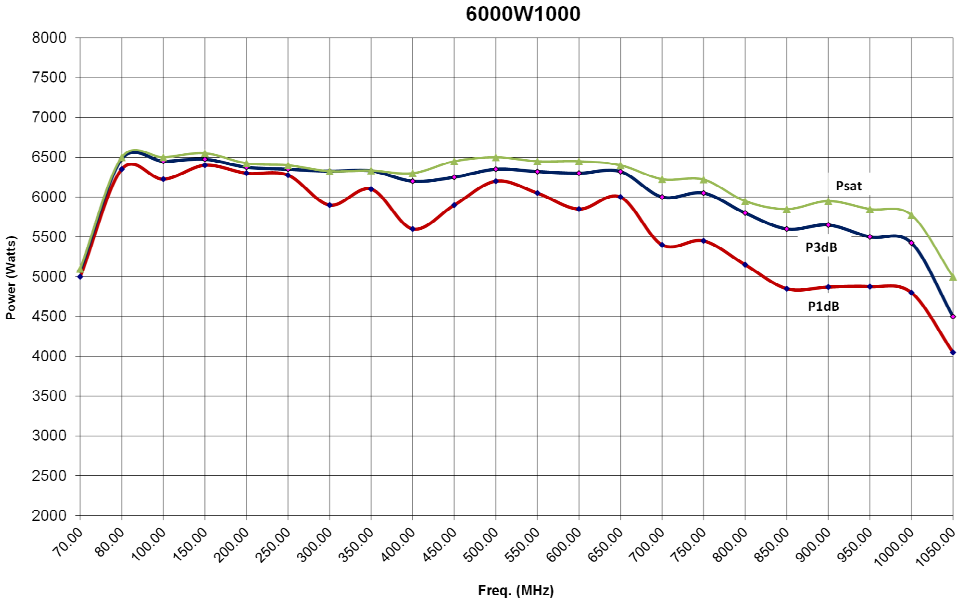
The Model 6000W1000 is a self-contained, air-cooled, broadband, completely solid-state amplifier designed for applications where instantaneous bandwidth and high gain are required. Push-pull circuitry is utilized in all high power stages in the interest of lowering distortion and improving stability. The Model 6000W1000, when used with an RF sweep generator, nominally provides over 6000 watts of RF power.

The Model 6000W1000 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 and a single rotary knob to offer status reporting and control capability. The display provides operational presentation of Forward Power and Reflected Power plus amplifier status. Special features include a gain control, internal automatic level control (ALC) with front panel control of the ALC threshold, forward and reflective RF sample ports for precise power measurements and RF output level protection. Protection is provided by DC current level sensing of all output stages.

All amplifier control functions and status indications are available remotely in GPIB/IEEE-488 format and RS-232 hardware and fiber optic, USB and Ethernet. The buss interface connector is located on the back panel and positive control of local or remote operation is assured by a keylock on the front panel of the amplifier.

Housed in a single equipment rack, the 6000W1000 provides readily available RF power for typical applications such as RF susceptibility testing, antenna and component testing, watt meter calibration, and as a driver for frequency multipliers and higher power amplifiers. A safety interlock can be implemented via a rear panel connector.

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.



AR RF/Microwave Instrumentation
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www.arworld.us

6000W1000

- 6000 Watts CW
- 80MHz–1000MHz

Specifications

RATED OUTPUT POWER: 6000 watts minimum

INPUT FOR RATED OUTPUT: 1.0 milliwatt maximum

POWER OUTPUT @ 3 dB compression:
Nominal 6000 watts, 5500 watts min up to 700 MHz, 5100 watts from 700 to 1000 MHz

POWER OUTPUT @ 1 dB compression:
Nominal 5500 watts, 5000 watts min up to 700 MHz; 4500 watts min from 700 to 1000 MHz

FLATNESS: ±2.0 dB maximum; ±1.5 dB typical

FREQUENCY RESPONSE: 80–1000 MHz instantaneously

GAIN (at maximum setting): 67.8 dB minimum

GAIN ADJUSTMENT (continuous range): 25 dB minimum

INPUT IMPEDANCE: 50 ohms, VSWR 1.5:1 maximum; 1.3:1 typical

OUTPUT IMPEDANCE: 50 ohms nominal

MISMATCH TOLERANCE: 100% of rated power without foldback, up to 6.0:1. Mismatch above which may limit to 3000 watts reflected power. Will operate without damage or oscillation with any magnitude and phase of source and load impedance. See Application Note #27.

MODULATION CAPABILITY: Faithfully reproduces AM, FM, or Pulse modulation appearing on input signal.

HARMONIC DISTORTION: Minus 20 dBc maximum at 5500 watts, -20 dBc typical @ 6000 watts

THIRD ORDER INTERCEPT POINT: 75 dBm typical

NOISE FIGURE: 8 dB maximum, 6 dB typical

PRIMARY POWER (specify voltage):
200-240 VAC Delta connected (4-wire)
360-435 VAC Wye connected (5-wire)
50/60 Hz, three phase, 24 kVA

CONNECTORS

RF Input:	Type N female, rear
RF Output:	Type 3-1/8 EIA female, rear
Forward sample:	Type N female, front (-70 dBc)
Reverse sample:	Type N female, front (-70 dBc)
Remote Interfaces:	
IEEE-488	24-pin female
RS-232	9-pin Subminiature D, female
Fiber Optic	ST Conn Tx and Rx RS-232
USB 2.0	Type B
Ethernet	RJ-45
Safety Interlock:	15-pin Subminiature D, rear

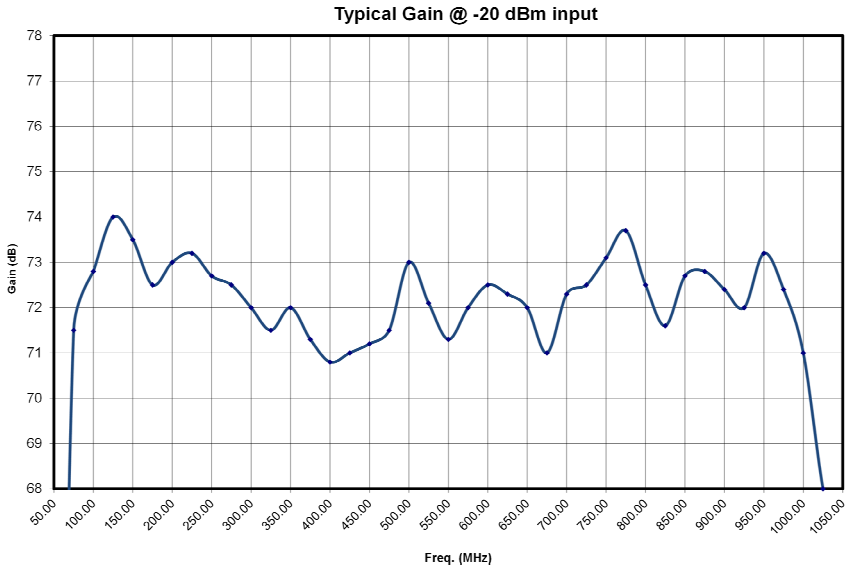
COOLING: Forced air (self contained fans), enters front and bottom

WEIGHT (approximate): 703 kg (1550 lb)

SIZE (W x H x D): (3 joined cabinets) 170 x 183 x 99 cm (67 x 72 x 39 in)

EXPORT CLASSIFICATION: EAR99

Graphs



Graphs

6000W1000

- 6000 Watts CW
- 80MHz–1000MHz