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Data Sheet

August 14, 2026

AMPLIFIER RESEARCH

Amplifier Research 30W1000B

Amplifier Research 30W1000B Solid State RF Amplifier The Amplifier Research 30W1000B is a portable self-contained air-cooled solid-state broadband amplifier providing 30 W CW minimum from 1 MHz to 1000 MHz. OEM 30W1000B M1 through M5 datasheets list push-pull high-power stages, front-panel gain control, mismatch tolerance, and IEEE-488/RS-232 remote interfaces. RF susceptibility testing, antenna and component testing, wattmeter calibration, and driver service through 1 GHz. Input For Rated Output: 1.0 milliwatt maximum The Amplifier Research 30W1000B is a portable self-contained air-cooled solid-state broadband amplifier providing 30 W CW minimum from 1 MHz to 1000 MHz. OEM 30W1000B M1 through M5 datasheets list push-pull high-power stages, front-panel gain control, mismatch tolerance, and IEEE-488/RS-232 remote interfaces. RF susceptibility testing, antenna and component testing, wattmeter calibration, and driver service through 1 GHz. Input For Rated Output: 1.0 milliwatt maximum Power Output At 3 dB Compression Nominal: 36 watts



MODEL

**Amplifier Research
30W1000B**

CALIBRATION

**Available on
request**

CONDITION

Used

STATUS

In stock

RFQ / SKU

30W1000B

LISTING

<https://aumictechlabs.com/products/30w1000b-3/>

NIST-traceable cal

SAM registered

30-day returns

NAICS 423690 · 811210 · 541380

This unit

The Amplifier Research 30W1000B is a self-contained, air-cooled solid-state broadband amplifier engineered for radiated immunity testing and RF research applications. Operating across 1 MHz to 1000 MHz with instantaneous bandwidth, this portable 30-watt minimum output amplifier delivers

45 dB minimum gain and ± 1.5 dB maximum gain flatness across its operating range. Push-pull circuitry in high-power stages ensures stability and low distortion, while harmonic content remains below -20 dBc. The unit accepts RF input levels up to 1.0 mW for rated output and integrates RF input overdrive protection via limiting diodes and leveling circuitry. Over-temperature protection automatically removes DC voltage if cooling is compromised. A front-panel gain control enables convenient output adjustment. The amplifier matches 50 Ohm impedance at input and output, operates reliably into any load impedance without foldback, and maintains greater than 45% efficiency. Digital display provides operational status and fault indication. IEEE-488 (GPIB), RS-232, Ethernet, and USB interfaces support both local and remote operation.

Technical Specifications
Frequency Range: 1 MHz to 1000 MHz
Rated Output Power: 30 watts minimum
Maximum RF Input: 1.0 mW for rated output
Gain (maximum setting): 45 dB minimum
Gain Flatness: ± 1.5 dB maximum
Harmonic Distortion: 45%
Input/Output Impedance: 50 Ohms
Input Impedance (50 Ohm): Operates at 100% rated power without foldback into any load impedance

Key Features
Push-pull high-power stage circuitry for enhanced stability and reduced distortion
RF input overdrive protection with limiting diodes and leveling circuit
Over-temperature protection with automatic DC voltage removal
Front-panel gain control for output level adjustment
Digital display for status and fault indication
Modulation capable

Typical Applications
Radiated immunity and EMI susceptibility testing
RF source for MRI research studies
Driving frequency multipliers and high-power amplifiers
Research and development
Laboratory testing

Compatibility & Integration
Control Interfaces: IEEE-488 (GPIB), RS-232 (asynchronous, full duplex), Ethernet, USB
RF Connector: Type N (SMA Female)
Form Factor: 19-inch rack-mountable, 3U height
Dimensions: 50.3 × 15.5 × 37.6 cm
Weight: Approximately 25 lbs
Cooling: Self-contained air-cooled

30W1000B Characteristics / Specifications

PARAMETER	VALUE
Rated Output Power	30 watts minimum
Input For Rated Output	1.0 milliwatt maximum
Power Output At 3 dB Compression Nominal	36 watts
Power Output At 3 dB Compression Minimum	30 watts
Power Output At 1 dB Compression Nominal	27 watts
Power Output At 1 dB Compression Minimum	20 watts
Flatness Typical	plus or minus 1.0 dB
Flatness Maximum	plus or minus 1.5 dB
Frequency Response	1 to 1000 MHz instantaneously
Gain At Maximum Setting	45 dB minimum
Gain Adjustment Continuous Range	20 dB minimum (4096 steps remote)
Input Impedance	50 ohms, VSWR 2.0:1 maximum
Output Impedance	50 ohms nominal
Mismatch Tolerance	100 percent of rated power without foldback; any magnitude/phase load
Modulation Capability	Faithful AM FM pulse reproduction
Harmonic Distortion At 25 W	minus 20 dBc maximum
Third Order Intercept Typical	52 dBm
Primary Power Maximum	325 watts
Remote Interfaces	IEEE-488 and RS-232
RF Connector Class	TypeNfemale
Cooling	Forced air self contained fans
Mass Class	20.5 kg class

PARAMETER	VALUE
Export Classification Class	EAR99 family class

30W1000B Specifications

PARAMETER	VALUE
Amplifier Research 30W1000B Solid State RF Amplifier	Overview
Applications	RF susceptibility testing, antenna and component testing, wattmeter calibration, and driver service through 1 GHz.
Technical Specifications	Rated Output Power: 30 watts minimum

Full OEM specifications

Complete technical content extracted from the manufacturer datasheet. Sparse OEM tables are reconstructed as tables below; other text is preserved as paragraphs.

Specifications	
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Notes	
From Amplifier Research Model 30W1000B M1 through M5 OEM specification sheet. Confirm connector face and exact enclosure on the configuration row.	

Available from Aumictech

Used and refurbished unit evaluated in-house. Calibration: Available on request. Used · In stock.

Request a quote: sales@aumictech.com · +1 (484) 841-9341

Aumictech

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NIST-traceable calibration · SAM registered ·
30-day returns
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Technical content from manufacturer specifications. Unit photo/stock from Aumictech listing when available. Specifications subject to OEM documentation and unit condition.