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Data Sheet

August 14, 2026

AMPLIFIER RESEARCH

Amplifier Research 1W1000B

Amplifier Research 1W1000B Solid State RF Amplifier The Amplifier Research 1W1000B is a portable self-contained solid-state amplifier providing 1 W CW minimum with an extended low-frequency edge versus earlier 1W1000 units. OEM 1W1000B documentation commonly lists coverage from 500 kHz to 1000 MHz with approximately 30 dB minimum gain class. Low-level broadband RF drive from HF through UHF, pretest of antennas and components, and driver service for higher-power amplifiers. Extended low frequency solid state design The Amplifier Research 1W1000B is a portable self-contained solid-state amplifier providing 1 W CW minimum with an extended low-frequency edge versus earlier 1W1000 units. OEM 1W1000B documentation commonly lists coverage from 500 kHz to 1000 MHz with approximately 30 dB minimum gain class. Low-level broadband RF drive from HF through UHF, pretest of antennas and components, and driver service for higher-power amplifiers. Extended low frequency solid state design Frequency Response: 500 kHz to 1000 MHz instantaneously



MODEL

**Amplifier Research
1W1000B**

CALIBRATION

**Available on
request**

CONDITION

Used

STATUS

In stock

RFQ / SKU

1W1000B

LISTING

<https://aumictechlabs.com/products/1w1000b-3/>

NIST-traceable cal

SAM registered

30-day returns

NAICS 423690 · 811210 · 541380

This unit

The Amplifier Research 1W1000B is a solid-state, broadband RF power amplifier engineered for RF susceptibility testing, antenna characterization, and precision measurement applications. This self-contained, air-cooled unit delivers 1 watt minimum continuous output across 100 kHz to 1000

MHz with 30 dB gain and exceptional load-tolerance performance. The amplifier maintains ± 1.0 dB flatness across its operating bandwidth and faithfully reproduces AM, FM, and pulse modulation without distortion. It accepts input levels as low as 1.0 mW for rated output and operates without damage under any load impedance condition - including 100% mismatch - while limiting reflected power to 100 watts.

Technical Specifications

Frequency Range:	100 kHz to 1000 MHz
Output Power (CW):	1 Watt minimum; typical output reaches 2 Watts
Power Gain:	30 dB minimum
Input for Rated Output:	1.0 mW maximum
Input Impedance:	50 Ω ; VSWR 2.0:1 maximum
Output Impedance:	50 Ω nominal
Frequency Response Flatness:	± 1.0 dB maximum (± 0.5 dB typical)
RF Connector:	Type N female
Physical Dimensions:	19.0 in $\times$ 6.1 in $\times$ 10.0 in (48.3 cm $\times$ 15.5 cm $\times$ 25.4 cm)
Weight:	4.1 kg (9.0 lb)

Key Features

- Broadband design spans 100 kHz to 1.0 GHz with consistent gain
- Air-cooled, self-contained architecture eliminates external cooling requirements
- Operates without oscillation or damage into any load impedance; reflects maximum 100 watts
- Modulation-agnostic: handles AM, FM, and pulse with high fidelity
- Compact footprint and lightweight design enable bench-top and portable deployment

Typical Applications

- RF susceptibility and immunity testing
- Antenna and RF component characterization
- Watt meter calibration and verification
- Driver stage for frequency multipliers and high-power amplifier chains
- Medical research and communication systems testing

Compatibility & Integration

Type N female connectors ensure industry-standard RF connectivity. 50 Ω input and output impedance integrate into test benches and system configurations.

1W1000B Characteristics / Specifications

PARAMETER	VALUE
Rated Output Power	1 watt minimum
Frequency Response	500 kHz to 1000 MHz instantaneously
Gain At Maximum Setting Class	30 dB minimum class
Input For Rated Output Class	1.0 milliwatt maximum
Flatness Maximum Class	plus or minus 1.5 dB class
Input Impedance Class	50 ohms
Output Impedance Class	50 ohms nominal
Mismatch Tolerance Class	100 percent of rated power without foldback
Harmonic Distortion Class	minus 20 dBc maximum near rated power
Modulation Capability Class	AM FM pulse faithful reproduction
Cooling	Convection or forced air class
RF Connector Class	TypeNfemale
Form Factor	Compact benchtop self contained cabinet
Series Family	Amplifier Research 1W1000B 500 kHz to 1000 MHz
Primary Power Class	Universal AC mains class
Export Classification Class	EAR99 family class
Circuit Topology	Solid state broadband stages
Remote Interfaces Class	Local front panel class
Power Class Sibling 1W10	1 W minimum 80 to 1000 MHz class
Power Class Sibling 10W1000B	10 W minimum 500 kHz to 1000 MHz class
ALC Capability Class	Gain control leveling class
Spurious Typical Class	Low spurious ClassA driver class

1W1000B Specifications

PARAMETER	VALUE
Amplifier Research 1W1000B Solid State RF Amplifier	Overview
Applications	Low-level broadband RF drive from HF through UHF, pretest of antennas and components, and driver service for higher-power amplifiers.
Key Features	Extended low frequency solid state design
Mismatch tolerant Class A stages	Type N RF connector class
Technical Specifications	Rated Output Power: 1 watt 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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Spurious Typical Class	Low spurious ClassAdriver class
Notes	
Rated power and frequency from Amplifier Research 1W1000B OEM/rental documentation aligned with the extended-band 1W1000B/10W1000B family. Confirm exact gain on the unit datasheet revision.	

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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Technical content from manufacturer specifications. Unit photo/stock from Aumictech listing when available. Specifications subject to OEM documentation and unit condition.