Aumictech
Test & measurement · bought, sold, repaired, calibrated

Data Sheet
August 14, 2026

AMPLIFIER RESEARCH

Amplifier Research 1W1000

Export Classification Class: EAR99 family class Circuit Topology: Solid state broadband stages Remote Interfaces Class: Local front panel class Power Class Sibling 1W1000B: 1 W minimum extended low band class Circuit Topology: Solid state broadband stages Remote Interfaces Class: Local front panel class Power Class Sibling 1W1000B: 1 W minimum extended low band class ALC Capability Class: Gain control leveling class

MODEL **Amplifier Research 1W1000**	CALIBRATION **Available on request**
CONDITION **Used**	STATUS **In stock**
RFQ / SKU **1W1000**	LISTING **https://aumictechlabs.com/products/1w1000-3/**

NIST-traceable cal · SAM registered · 30-day returns · NAICS 423690 · 811210 · 541380

This unit

The Amplifier Research 1W1000 is a solid-state, air-cooled broadband RF amplifier engineered for laboratory testing and signal amplification across 100 kHz to 1000 MHz. Delivering 1 W minimum CW linear output with 30 dB minimum gain, the unit operates from a single 1.0 mW input to produce up to 2 W saturated power. The amplifier maintains ±1.0 dB maximum flatness across its instantaneous bandwidth while accepting any load impedance - including shorted or open cables - without foldback, damage, or oscillation.Modulation-transparent design preserves AM, FM, and pulse characteristics present at the input. Housed in a compact 4.1 kg package with forced-air cooling, it draws maximum 50 W from single-phase 100–240 VAC mains, making it suitable for EMC testing, antenna characterization, watt meter calibration, and as a driver stage for multipliers and high-power amplifiers.Technical Specifications Frequency range: 100 kHz to 1000 MHz CW

linear power output: 1 W minimum; 2 W typical and saturated Power gain: 30 dB minimum Gain flatness: ±0.5 dB typical, ±1.0 dB maximum Input level for rated output: 1.0 mW maximum Input impedance: 50 ohms (VSWR 2.0:1 maximum) Output impedance: 50 ohms (VSWR 2.5:1 maximum) Noise figure: 8 dB typical Harmonic distortion: ≤−20 dBc below fundamental at 1.0 W output Third-order intercept point: 42 dBm typical Primary power: 100/110/120/200/208/220/240 VAC ±5%, 50/60 Hz, single-phase Power consumption: 50 W maximum RF connectors: Type N FemaleKey Features Broadband instantaneous bandwidth from 100 kHz to 1 GHz Flat gain response across operating range Unconditional stability with any passive load impedance Modulation-transparent operation for AM, FM, and pulse signals Compact form factor: 4.1 kg Self-contained forced-air coolingTypical Applications RF susceptibility and EMC testing Antenna and RF component validation Watt meter calibration Driver stage for frequency multipliers Driver amplifier for high-power systemsCompatibility & Integration Type N Female connectors provide standard 50-ohm connectivity. The unit operates from universal single-phase AC mains and requires only standard forced-air ventilation for thermal management.

1W1000 Characteristics / Specifications

PARAMETER	VALUE
Rated Output Power	1 watt minimum
Frequency Response	80 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 W1000 80 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 1W1000B	1 W minimum extended low band class
Power Class Sibling 4W10	4 W minimum
ALC Capability Class	Gain control leveling class
Spurious Typical Class	Low spurious ClassAdriver class

1W1000 Specifications

PARAMETER	VALUE
Amplifier Research 1W1000 Solid State RF Amplifier	Overview
Applications	Low-level RF drive, pretest of antennas and components, and driver service for higher-power amplifiers through 1 GHz.
Key Features	Compact solid state W1000 family 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

Specifications

PARAMETER	VALUE
Rated Output Power	1 watt minimum
Frequency Response	80 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 W1000 80 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 1W1000B	1 W minimum extended low band class
Power Class Sibling 4W1000	4 W minimum
ALC Capability Class	Gain control leveling class
Spurious Typical Class	Low spurious ClassAdriver class

Notes
Rated power and frequency from Amplifier Research 1W1000 OEM/rental W1000 family documentation. Related 1W1000B sheets may extend the low-frequency edge; confirm the faceplate band.

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
788 S 500 E, Pleasant Grove, UT 84062
sales@aumictech.com · +1 (484) 841-9341
https://aumictechlabs.com

NIST-traceable calibration · SAM registered · 30-day returns
NAICS 423690 · 811210 · 541380
Generated August 14, 2026