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Data Sheet
August 14, 2026

AMPLIFIER RESEARCH

Amplifier Research 10W1000A

Amplifier Research 10W1000A Solid State RF Amplifier The Amplifier Research 10W1000A isaportable self-contained air-cooled solid-state amplifier providing 10 W CW minimum from 80 MHz to 1000 MHz (W1000A family band). OEM documentation lists approximately 40 dB minimum gain class, front-panel gain control, and mismatch-tolerant ClassAstages. Low-power RF susceptibility testing, antenna and component testing, wattmeter calibration, and driver service for higher-power amplifiers. Frequency Response: 80 to 1000 MHz instantaneously The Amplifier Research 10W1000A isaportable self-contained air-cooled solid-state amplifier providing 10 W CW minimum from 80 MHz to 1000 MHz (W1000A family band). OEM documentation lists approximately 40 dB minimum gain class, front-panel gain control, and mismatch-tolerant ClassAstages. Low-power RF susceptibility testing, antenna and component testing, wattmeter calibration, and driver service for higher-power amplifiers. Frequency Response: 80 to 1000 MHz instantaneously Gain At Maximum Setting Class: 40 dB minimum class

MODEL **Amplifier Research 10W1000A**	CALIBRATION **Available on request**
CONDITION **Used**	STATUS **In stock**
RFQ / SKU **10W1000A**	LISTING **https://aumictechlabs.com/products/10w1000a-3/**

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NAICS 423690 · 811210 · 541380

This unit

The Amplifier Research 10W1000A is a solid-state, air-cooled RF power amplifier delivering 10 W continuous-wave output across 1 MHz to 1 GHz. Built on push-pull circuitry in high-power stages,

it achieves 40 dB minimum gain with exceptionally low distortion and load-mismatch immunity. The amplifier accepts input signals up to 1 mW for rated output and saturates at 18 W typical, making it equally capable in EMC testing, communications systems, antenna characterization, component validation, and RF source applications.Its self-contained design eliminates external cooling infrastructure while internal protection - crowbar circuits, over-temperature sensing, and unconditional stability against any source or load VSWR - ensures operation under worst-case mismatch conditions, including shorted or open cables, without shutdown or damage.Technical Specifications Frequency & Power Operating range: 1 MHz to 1 GHz Rated output power (CW): 10 W Saturated output power: 18 W typical Gain (minimum): 40 dB Input power for rated output: 1 mW maximum Third-order intercept point: 42 dBm typical Impedance & Signal Integrity Input impedance: 50 ohms; VSWR 2.0:1 maximum Output impedance: 50 ohms nominal Harmonic distortion: −20 dBc maximum at 1 W Noise figure: 8 dB typical Modulation fidelity: 100% AM, FM, and pulse reproduction Power & Thermal Primary power: 100/110/120/200/208/220/240 VAC ±5%, 50/60 Hz, single-phase Power consumption: ≤500 W Cooling: Forced air with self-contained fansKey Features Push-pull topology reduces distortion and improves stability Load-mismatch tolerant: immune to shorted or open-cable terminations Crowbar protection against input overdrive; over-temperature protection at output stage Type N female RF connectors Rated input signal protection to 20× nominal (20 mW); signals exceeding 30 mW or high peak-voltage transients require input attenuationTypical Applications EMC compliance and immunity testing RF communications system validation Antenna and component characterization Wattmeter calibration and metrology Specialized RF researchCompatibility & Integration The 10W1000A operates unconditionally stable into any load VSWR magnitude and phase. RF interface is Type N female. Primary power accepts single-phase 100–240 VAC ±5% at 50 or 60 Hz.

10W1000A Characteristics / Specifications

PARAMETER	VALUE
Rated Output Power	10 watts minimum
Frequency Response	80 to 1000 MHz instantaneously
Gain At Maximum Setting Class	40 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 VSWR 1.5:1 to 2.0:1 maximum class
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	Forced air self contained fans
RF Connector Class	TypeNfemale
Form Factor	Portable self contained air cooled cabinet
Series Family	Amplifier Research 10W1000A 80 to 1000 MHz
Primary Power Class	Universal AC mains class
Export Classification Class	EAR99 family class
Circuit Topology	Push pull solid state broadband stages
Remote Interfaces Class	Local front panel with optional IEEE 488 RS 232 class
Power Class Sibling 10W1000B	10 W minimum 500 kHz to 1000 MHz class
Power Class Sibling 30W1000M	30 W minimum
ALC Capability Class	Gain control leveling class
Spurious Typical Class	Low spurious ClassAdriver class

10W1000A Specifications

PARAMETER	VALUE
Amplifier Research 10W1000A Solid State RF Amplifier	Overview
Applications	Low-power RF susceptibility testing, antenna and component testing, wattmeter calibration, and driver service for higher-power amplifiers.
Key Features	Solid state broadband W1000A design
Mismatch tolerant Class A stages	Type N RF connector class
Technical Specifications	Rated Output Power: 10 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

Specifications

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Power Class Sibling 30W1000M7	30 W minimum
ALC Capability Class	Gain control leveling class
Spurious Typical Class	Low spurious ClassAdriver class

Notes
Rated power and frequency from Amplifier Research 10W1000A OEM/rental documentation. Some related 10W1000B sheets extend the low end to 500 kHz; confirm the faceplate band for the specific A-suffix unit.

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

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