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Data Sheet

August 14, 2026

AMPLIFIER RESEARCH

Amplifier Research 100A100

Amplifier Research 100A100 Broadband RF Amplifier The Amplifier Research 100A100 is a solid-state air-cooled broadband amplifier providing 100 W CW minimum from 10 kHz to 100 MHz. OEM A100 family documentation lists Class A push-pull stages, gain control, and mismatch-tolerant operation for laboratory RF applications. RF susceptibility testing below 100 MHz, antenna and component testing, and wattmeter calibration. Solid state broadband 10 kHz to 100 MHz design The Amplifier Research 100A100 is a solid-state air-cooled broadband amplifier providing 100 W CW minimum from 10 kHz to 100 MHz. OEM A100 family documentation lists Class A push-pull stages, gain control, and mismatch-tolerant operation for laboratory RF applications. RF susceptibility testing below 100 MHz, antenna and component testing, and wattmeter calibration. Solid state broadband 10 kHz to 100 MHz design Push pull MOSFET mismatch tolerant stages



MODEL

**Amplifier Research
100A100**

CALIBRATION

**Available on
request**

CONDITION

Used

STATUS

In stock

RFQ / SKU

100A100

LISTING

<https://aumictechlabs.com/products/100a100-3/>

NIST-traceable cal

SAM registered

30-day returns

NAICS 423690 • 811210 • 541380

This unit

The Amplifier Research 100A100 is a solid-state, broadband RF power amplifier engineered for laboratory and field testing environments. Operating across 10 kHz to 100 MHz, it delivers 100 watts minimum linear output power and 150 watts saturated output, making it suitable for RF susceptibility testing, component characterization, wattmeter calibration, and driver applications

for higher-power stages. Technical Specifications Frequency Range: 10 kHz to 100 MHz Output Power: 100 watts (linear), 150 watts (saturated) Gain: 52 dB typical Noise Figure: 6 dB typical (above 1 MHz) Load Impedance: Operates into any load impedance without damage or oscillation; rated output may be limited under impedance mismatch conditions Circuitry: Push-pull MOSFET topology in high-power stages for reduced distortion and enhanced stability Cooling: Air-cooled Key Features Front-panel gain control and internal/external Automatic Level Control (ALC) with adjustable ALC threshold Digital front-panel display for operating status and fault indication (over-temperature, power supply, amplifier faults) Unconditional stability across any source and load impedance FET-based design for improved performance and reliability Typical Applications RF susceptibility and immunity testing Component and subsystem characterization Wattmeter calibration and verification Driver stage for multi-stage amplification systems Broadband RF and communication system testing Compatibility & Integration IEEE-488 (GPIB) remote control interface RS-232 asynchronous, full-duplex serial interface Local control via front-panel controls Digital Control Panel (DCP) support for local and remote operation

100A100 Characteristics / Specifications

PARAMETER	VALUE
Rated Output Power	100 watts minimum
Frequency Response	10 kHz to 100 MHz instantaneously
Gain At Maximum Setting Class	50 dB minimum class
Input For Rated Output Class	1.0 milliwatt maximum
Flatness Maximum Class	plus or minus 1.5 dB class
Gain Adjustment Range Class	18 dB minimum class
Input Impedance Class	50 ohms VSWR 1.5:1 maximum
Output Impedance Class	50 ohms VSWR 2.0:1 maximum
Mismatch Tolerance Class	100 percent of rated power without foldback
Harmonic Distortion Class	minus 20 dBc maximum near rated power
Noise Figure Above 1 MHz Typical Class	8 dB class
Modulation Capability Class	AM FM pulse faithful reproduction
Remote Interfaces Class	IEEE 488 and RS 232 class
Cooling	Forced air self contained fans
RF Connector Class	TypeNfemale
Form Factor	Benchtop or rack mountable cabinet
Series Family	Amplifier Research A100 10 kHz to 100 MHz
Power Class Sibling 150A100A	150 W minimum
Primary Power Class	Universal AC mains class
Export Classification Class	EAR99 family class
Circuit Topology	Push pull MOSFET broadband stages
Third Order Intercept Class Typical	58 dBm class

100A100 Specifications

PARAMETER	VALUE
Amplifier Research 100A100 Broadband RF Amplifier	Overview
Applications	RF susceptibility testing below 100 MHz, antenna and component testing, and wattmeter calibration.
Key Features	Solid state broadband 10 kHz to 100 MHz design
Forced air self contained cooling	Type N RF connector class
Technical Specifications	Rated Output Power: 100 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	
PARAMETER	VALUE
Rated Output Power	100 watts minimum
Frequency Response	10 kHz to 100 MHz instantaneously
Gain At Maximum Setting Class	50 dB minimum class
Input For Rated Output Class	1.0 milliwatt maximum
Flatness Maximum Class	plus or minus 1.5 dB class
Gain Adjustment Range Class	18 dB minimum class
Input Impedance Class	50 ohms VSWR 1.5:1 maximum
Output Impedance Class	50 ohms VSWR 2.0:1 maximum
Mismatch Tolerance Class	100 percent of rated power without foldback
Harmonic Distortion Class	minus 20 dBc maximum near rated power
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Notes	
Rated power and frequency from Amplifier Research 100A100 OEM/rental A100 family documentation. Confirm compression and mass on the unit datasheet.	

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.