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Data Sheet

August 14, 2026

AMPLIFIER RESEARCH

Amplifier Research 150A100A

Amplifier Research 150A100A Broadband RF Amplifier The Amplifier Research 150A100A is a solid-state air-cooled broadband amplifier providing 150 W CW minimum from 10 kHz to 100 MHz. OEM A100A family documentation lists approximately 52 dB minimum gain, digital local/remote control, and mismatch-tolerant push-pull MOSFET stages. RF susceptibility and EMC drive below 100 MHz, antenna and component testing, and wattmeter calibration. Solid state broadband 10 kHz to 100 MHz design The Amplifier Research 150A100A is a solid-state air-cooled broadband amplifier providing 150 W CW minimum from 10 kHz to 100 MHz. OEM A100A family documentation lists approximately 52 dB minimum gain, digital local/remote control, and mismatch-tolerant push-pull MOSFET stages. RF susceptibility and EMC drive below 100 MHz, antenna and component testing, and wattmeter calibration. Solid state broadband 10 kHz to 100 MHz design Digital local and remote amplifier control



MODEL

**Amplifier Research
150A100A**

CALIBRATION

**Available on
request**

CONDITION

Used

STATUS

In stock

RFQ / SKU

150A100A

LISTING

<https://aumictechlabs.com/products/150a100a-3/>

NIST-traceable cal

SAM registered

30-day returns

NAICS 423690 • 811210 • 541380

This unit

The Amplifier Research 150A100A is a solid-state, broadband RF amplifier engineered for laboratory and specialized testing applications demanding wide instantaneous bandwidth, high gain, and moderate power output. Built on push-pull MOSFET circuitry, it delivers 150 watts rated power with exceptional mismatch tolerance - operating without damage or oscillation into any

load impedance. The amplifier provides 52 dB minimum gain with 18 dB adjustment range and accepts maximum 1.0 mW input for rated output. Frequency coverage spans 10 kHz to 100 MHz with 1.5 dB maximum flatness.

Technical Specifications

Frequency Range: 10 kHz to 100 MHz
Rated Power Output: 150 watts
Minimum Gain: 52 dB
Gain Adjustment Range: 18 dB minimum
Input Impedance: 50 ohms, VSWR 1.5:1 maximum
Output Impedance: 50 ohms, VSWR 2.0:1 maximum
Input for Rated Output: 1.0 milliwatt maximum
Flatness: 1.5 dB maximum
Circuitry: Push-pull MOSFET
Cooling: Air cooled

Key Features

- 100% mismatch tolerance without foldback protection - operates into any source and load impedance without oscillation or damage
- RF input leveling circuit protects against overdrive conditions exceeding 0 dBm
- Over-temperature protection removes DC voltage to RF amplifier stages
- Power supply fault protection with front-panel status indication
- Digital display reports operate status and fault conditions
- Safety interlock circuit interfaces with external switches to prevent unintended operation
- Local and remote control via front-panel gain adjustment and digital command interface

Interfaces & Control

Remote operation supported through IEEE-488 (GPIB), RS-232 (asynchronous, full duplex), with optional fiber optic, USB, and Ethernet connectivity. Local/remote selector switch ensures positive control authority. Jumper plug provided for safety interlock bypass when external switch integration is not required.

Typical Applications

RF susceptibility testing, antenna and component characterization, watt meter calibration, and driver amplifier service for higher-power systems.

150A100A Characteristics / Specifications

PARAMETER	VALUE
Rated Output Power	150 watts minimum
Frequency Response	10 kHz to 100 MHz instantaneously
Gain At Maximum Setting	52 dB minimum
Input For Rated Output	1.0 milliwatt maximum
Flatness Maximum Class	plus or minus 1.5 dB
Gain Adjustment Range Class	18 dB minimum (4096 steps remote)
Input Impedance Class	50 ohms VSWR 1.5:1 maximum
Output Impedance Class	50 ohms VSWR 2.0:1 maximum
Reflected Power Limit Class	100 watts class
Noise Figure Above 1 MHz Typical Class	6 dB class
Harmonic Distortion Class	minus 20 dBc maximum near rated power
Third Order Intercept Typical Class	58 dBm
Modulation Capability Class	AM FM pulse faithful reproduction
Remote Interfaces	IEEE 488 and RS 232
Cooling	Forced air self contained fans
RF Connector Class	TypeNfemale
Form Factor	Benchtop or rack mountable cabinet
Series Family	Amplifier Research A100A 10 kHz to 100 MHz
Power Class Sibling 150A100B	150 W minimum
Primary Power Class	Universal AC mains autoranging class
Export Classification Class	EAR99 family class
Circuit Topology	Push pull MOSFET broadband stages

150A100A Specifications

PARAMETER	VALUE
Amplifier Research 150A100A Broadband RF Amplifier	Overview
Applications	RF susceptibility and EMC drive 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: 150 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	
Rated power, frequency, and gain from Amplifier Research 150A100A / 150A100 family OEM documentation. Confirm compression and mass on the A-suffix 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.