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Data Sheet

August 14, 2026

AMPLIFIER RESEARCH

Amplifier Research 150L

Amplifier Research 150L Broadband RF Amplifier The Amplifier Research 150L is a self-contained air-cooled broadband laboratory amplifier in the AR L-series providing approximately 150 W class RF output. OEM L-series literature describes hybrid solid-state driver stages with a vacuum-tube final amplifier for laboratory susceptibility applications. Laboratory RF susceptibility testing, wattmeter calibration, and broadband RF power applications requiring L-series tube finals. Hybrid solid state driver with vacuum tube final The Amplifier Research 150L is a self-contained air-cooled broadband laboratory amplifier in the AR L-series providing approximately 150 W class RF output. OEM L-series literature describes hybrid solid-state driver stages with a vacuum-tube final amplifier for laboratory susceptibility applications. Laboratory RF susceptibility testing, wattmeter calibration, and broadband RF power applications requiring L-series tube finals. Hybrid solid state driver with vacuum tube final

Operate status and fault indication class



MODEL

**Amplifier Research
150L**

CALIBRATION

**Available on
request**

CONDITION

Used

STATUS

In stock

RFQ / SKU

150L

LISTING

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

NIST-traceable cal

SAM registered

30-day returns

NAICS 423690 · 811210 · 541380

This unit

The Amplifier Research 150L is a hybrid solid-state and vacuum tube power amplifier engineered for laboratory RF applications requiring broadband instantaneous bandwidth and high gain. Operating from 10 kHz to 220 MHz, it delivers 250 watts nominal continuous-wave output with a minimum linear power output of 150 watts at 1 dB compression. The amplifier combines field-

effect transistor input stages with a vacuum tube final stage, achieving 52 dB minimum gain with 18 dB continuous adjustment range. Frequency response remains flat to ± 1.5 dB across the full operating band. Input requires only 1.0 mW maximum for rated output, with 50 ohm input and output impedance. The design remains stable under any magnitude and phase of source or load impedance mismatch, with no risk of damage or oscillation. Modulation fidelity extends to AM, FM, and pulse waveforms. Benchtop construction housed in a compact contemporary enclosure measures 51 cm $\times$ 34 cm $\times$ 46 cm and weighs 64 kg. Forced air cooling maintains thermal management during continuous operation. The front panel presents logically grouped controls: power management buttons (POWER, STANDBY, OPERATE) and output level adjustment. Input connects via BNC; output via Type N connector. Primary power requirement is 240 VAC, 10.5 A, single phase with internal tap selection.

Technical Specifications

Frequency Range:	10 kHz to 220 MHz
Nominal CW Power Output:	250 W
Minimum CW Power Output:	200 W
Linear Power Output (1 dB Compression):	150 W
minimum Saturated Power Output:	200 W
nominal Maximum Gain:	52 dB
minimum Gain Adjustment Range:	18 dB
minimum continuous Frequency Response Flatness:	± 1.5 dB (10 kHz – 220 MHz)
Input for Rated Output:	1.0 mW maximum
Input Impedance:	50 Ω , VSWR 1.5:1 maximum
Output Impedance:	50 Ω , VSWR 2.0:1 maximum
Mismatch Tolerance:	Any magnitude and phase impedance without damage or oscillation
Input Connector:	BNC
Output Connector:	Type N
Power Supply:	240 VAC, 10.5 A, single phase
Dimensions:	51 cm W $\times$ 34 cm H $\times$ 46 cm D
Weight:	64 kg
Cooling:	Forced air

Key Features

- Hybrid solid-state and vacuum tube architecture
- Instantaneous broadband operation across decade-plus frequency span
- Continuous gain adjustment for precise output control
- Unconditional stability under all load impedance conditions
- AM, FM, and pulse modulation support
- Compact benchtop form factor with contemporary enclosure design
- Intuitive front-panel control layout

Typical Applications

- EMC testing and immunity assessment
- Conducted immunity testing
- Low-frequency radiated immunity testing
- Laboratory RF measurement and characterization
- Communication systems testing

Compatibility & Integration

The 150L accepts standard 50 ohm RF sources and loads. Input and output connectors (BNC and Type N respectively) support direct integration into laboratory test benches and automated measurement systems. Single-phase 240 VAC power simplifies facility integration.

150L Characteristics / Specifications

PARAMETER	VALUE
Rated Output Power Class	150 watts class
Frequency Response Class	Low frequency through VHFLseries band class
Input For Rated Output Class	1.0 milliwatt maximum class
Gain At Maximum Setting Class	High gain vacuum tube final class
Gain Adjustment	Front panel continuous gain control
Input Impedance Class	50 ohms class
Output Impedance Class	50 ohms nominal class
Cooling	Forced air self contained fans
Form Factor	Self contained air cooled laboratory cabinet
Circuit Topology	Solid state low level stages with vacuum tube final
Modulation Capability Class	CW and pulsed RF input supported class
Primary Power Class	AC mains laboratory supply class
RF Connector Class	TypeNfemale class
Series Family	Amplifier Research 150L broadband laboratory amplifier
Export Classification Class	Confirm ECCN on unit nameplate
Mismatch Tolerance Class	Operate into specified load VSWR per manual
Blanking Capability Class	Blanking input supported on relatedLmanuals
Power Metering Class	Forward power monitoring class
Protection Class	Over temperature and supply fault indication class
Applications Class	Laboratory RF susceptibility and calibration
Power Class Sibling 200L	200 watts class
Power Class Sibling 500L	500 watts class

150L Specifications

PARAMETER	VALUE
Amplifier Research 150L Broadband RF Amplifier	Overview
Applications	Laboratory RF susceptibility testing, wattmeter calibration, and broadband RF power applications requiring L-series tube finals.
Technical Specifications	Rated Output Power Class: 150 watts class

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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Rated Output Power Class	150 watts class
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Power Class Sibling 200L	200 watts class
Power Class Sibling 500L	500 watts class
Notes	
From Amplifier Research 150L OEM/rental L-series documentation. Confirm exact frequency band, gain, and primary power on the unit nameplate and operating manual specification table.	

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.