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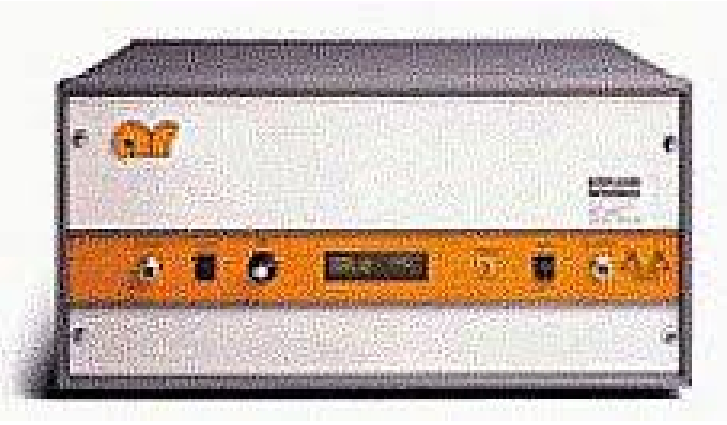
Data Sheet
August 14, 2026

AMPLIFIER RESEARCH

Amplifier Research 100LM9

Amplifier Research 100LM9 Solid State RF Amplifier The Amplifier Research 100LM9 isaself-contained air-cooled solid-state broadband amplifier providing 100 W CW minimum from 10 kHz to 100 MHz. OEM 100LM9 catalog and datasheet materials list instantaneous bandwidth, high gain, mismatch tolerance, and IEEE-488/RS-232 remote interfaces on the LM platform. RF susceptibility testing, antenna and component testing, wattmeter calibration, and broadband driver service from 10 kHz to 100 MHz. Forward and reflected power monitoring class The Amplifier Research 100LM9 isaself-contained air-cooled solid-state broadband amplifier providing 100 W CW minimum from 10 kHz to 100 MHz. OEM 100LM9 catalog and datasheet materials list instantaneous bandwidth, high gain, mismatch tolerance, and IEEE-488/RS-232 remote interfaces on the LM platform. RF susceptibility testing, antenna and component testing, wattmeter calibration, and broadband driver service from 10 kHz to 100 MHz. Forward and reflected power monitoring class Safety interlock rear panel connector class



MODEL **Amplifier Research 100LM9**	CALIBRATION **Available on request**
CONDITION **Used**	STATUS **In stock**
RFQ / SKU **100LM9**	LISTING **https://aumictechlabs.com/products/100lm9-3/**

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NAICS 423690 · 811210 · 541380

This unit

The Amplifier Research 100LM9 is a solid-state, air-cooled broadband power amplifier delivering 100 watts CW minimum across 10 kHz to 220 MHz instantaneously. Engineered for laboratory applications, it combines 50 dB minimum gain with low harmonic distortion and exceptional mismatch tolerance - operating without shutdown or damage under any source and load VSWR

condition. The 100LM9 handles demanding EMC testing, medical research, communications, and component characterization tasks where instantaneous bandwidth and stable output power are critical.Technical Specifications Power output: 100 watts CW minimum into 50 ohms Frequency response: 10 kHz to 220 MHz instantaneously Power gain: 50 dB minimum Input power for rated output: 1.0 milliwatt Frequency flatness: ±1.5 dB at 1.0 milliwatt input Harmonic distortion: ≤ -20 dB below fundamental (< 120 MHz); ≤ -30 dB below fundamental (≥ 120 MHz) at 100 watt output Input impedance: 50 ohms, VSWR 1.5:1 maximum Output impedance: 50 ohms, VSWR 2.0:1 maximum Mismatch tolerance: Operation without shutdown or damage under any magnitude or phase of source and load VSWR Primary power: 115/230 VAC, 50/60 Hz Power consumption: Approximately 2,600 watts RF connectors: Type NKey Features Self-contained, solid-state design with air cooling Unique protective circuitry for unconditional mismatch tolerance Instantaneous frequency coverage across three decades Low harmonic distortion performance across the bandTypical Applications EMC testing Medical and physics research Communications system development Antenna and component testing Wattmeter calibration Wireless charger testing Piezoelectric device characterizationCompatibility & Integration Type N connectors provide standard RF interfacing. Dual-voltage mains input (115/230 VAC, 50/60 Hz) accommodates global laboratory environments. Part of AR RF/Microwave Instrumentation's U Series.

100LM9 Characteristics / Specifications

PARAMETER	VALUE
Rated Output Power	100 watts minimum
Input For Rated Output	1.0 milliwatt maximum
Frequency Response	10 kHz to 100 MHz instantaneously
Gain At Maximum Setting	50 dB minimum
Gain Adjustment Continuous Range	18 dB minimum class remote stepped
Flatness Class	plus or minus 1.5 to 3.0 dB class by model family sheet
Power Output At Compression Class	see model datasheet P1dB and P3dB rows
Input Impedance	50 ohms, VSWR 2.0:1 maximum class
Output Impedance	50 ohms nominal
Mismatch Tolerance	operates without damage into high VSWR loads class
Modulation Capability	Faithful AM FM pulse reproduction
Harmonic Distortion Class	minus 20 dBc class at rated power family
Remote Interfaces	IEEE-488 and RS-232
RF Connector Class	TypeNfemale class
Cooling	Forced air self contained fans
Form Factor	Portable benchtop or rack amplifier class
Series Family	Amplifier Research 100LM9
Export Classification Class	EAR99 family class
Primary Power Class	universal AC mains auto ranging class
ALC Leveling	available class
Safety Interlock	rear panel interlock class
Linear Module Class	LM series

100LM9 Specifications

PARAMETER	VALUE
Amplifier Research 100LM9 Solid State RF Amplifier	Overview
Applications	RF susceptibility testing, antenna and component testing, wattmeter calibration, and broadband driver service from 10 kHz to 100 MHz.
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

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Linear Module Class	LM series

Notes
Rated power, band, and gain from Amplifier Research 100LM9 OEM catalog/datasheet summaries. Quote the exact configuration sheet for compression flatness mass and primary-power draw; do not assume sibling compression rows.

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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