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Data Sheet

August 14, 2026

AMPLIFIER RESEARCH

Amplifier Research 800A3A

Remote Interfaces Class: IEEE 488 and RS 232 class Primary Power Class: Universal AC mains multi kilowatt class Form Factor: Benchtop self contained air cooled cabinet Series Family: Amplifier Research 800A3A M1 through M3 Amplifier Research 800A3A Broadband RF Amplifier The Amplifier Research 800A3A is a benchtop self-contained air-cooled solid-state amplifier providing 800 W CW minimum from 10 kHz to 3 MHz. OEM product data list 60 dB minimum gain, 23 dB minimum gain adjustment, selectable load-matching taps, and digital forward/reflected power presentation. High-power low-frequency RF susceptibility testing, conducted immunity drive, and laboratory RF power applications below 3 MHz. Digital forward and reflected power display



MODEL

**Amplifier Research
800A3A**

CALIBRATION

**Available on
request**

CONDITION

Used

STATUS

In stock

RFQ / SKU

800A3A

LISTING

<https://aumictechlabs.com/products/800a3a-3/>

NIST-traceable cal

SAM registered

30-day returns

NAICS 423690 • 811210 • 541380

This unit

The Amplifier Research 800A3A is a solid-state, broadband RF amplifier engineered for laboratory and test environments requiring instantaneous bandwidth across 10 kHz to 3 MHz. This self-contained, air-cooled unit delivers 800 watts minimum continuous-wave power with exceptional gain and flatness, making it ideal for EMC testing, communication systems validation, and scientific research applications. Technical Specifications Frequency & Power Performance Frequency range: 10 kHz – 3 MHz (instantaneous) Rated power output: 800 W minimum (CW)

Power @ 3 dB compression: 800 W nominal / 700 W minimum (10 kHz–2 MHz), 600 W minimum (2 MHz–3 MHz) Power @ 1 dB compression: 500 W nominal / 400 W minimum Input for rated output: 1.0 mW maximum Gain & Impedance Minimum gain: 60 dB Gain adjustment range: 23 dB minimum (continuous) Input impedance: 50 Ω Output impedance: 12.5, 25, 50, 100, 150, 200, 400 Ω nominal (switch-selectable, manual) Flatness: ± 1.0 dB maximum Robustness Mismatch tolerance: Operates without damage at any load impedance phase and magnitude; handles 100% rated power without foldback up to 6.0:1 mismatch; limits to 400 W reflected power above 6.0:1 Modulation: Faithfully reproduces AM, FM, and pulse modulation Physical & Electrical Dimensions: 50.3 $\times$ 34.0 $\times$ 55.1 cm (19.8 $\times$ 13.4 $\times$ 21.7 in) Weight: 36.4 kg (80 lb) Primary power: 85–137 / 180–300 VAC, 43–63 Hz, 2500 W maximum Key Features Digital Control Panel (DCP) with local and remote operation via IEEE-488, RS-232, and USB Real-time display of forward power, reflected power, control status, and amplifier status Continuously variable gain control RF output level protection Hot-switchable output impedance matching Keylock for operation mode selection Type N female RF connectors (input and output, front panel) Configurable as sub-amplifier for higher-power systems (1500 W or 5000 W) Typical Applications EMC and EMI testing Communication system characterization Scientific research requiring wideband RF amplification Laboratory RF testing with variable load impedance Compatibility & Integration The 800A3A operates as a standalone amplifier for RF testing and can be integrated as a sub-amplifier within higher-power Amplifier Research systems.

800A3A Characteristics / Specifications

PARAMETER	VALUE
Rated Output Power	800 watts minimum
Frequency Response	10 kHz to 3 MHz instantaneously
Gain At Maximum Setting	60 dB minimum
Gain Adjustment Range	23 dB minimum
Input For Rated Output	1.0 milliwatt maximum
Flatness Maximum Class	plus or minus 1.0 dB
Input Impedance	50 ohms
Output Impedance Switch Select Class	Multi tap 12.5 to 400 ohms nominal class
Mismatch Tolerance Class	Operate without damage into severe VSWR class
Modulation Capability Class	AM FM pulse faithful reproduction
Weight	36.4 kg (80 lb)
Size WxHxD	50.3 × 34.0 x 55.1 cm
Cooling	Forced air self contained fans
RF Input Connector	TypeNfemale front
RF Output Connector	TypeNfemale front
Remote Interfaces Class	IEEE 488 and RS 232 class
Primary Power Class	Universal AC mains multi kilowatt class
Form Factor	Benchtop self contained air cooled cabinet
Series Family	Amplifier Research 800A3A M1 through M3
Export Classification Class	EAR99 family class
Circuit Topology	Broadband solid state with output matching transformer
Power Class Sibling 800A	800 watts minimum

800A3A Specifications

PARAMETER	VALUE
Amplifier Research 800A3A Broadband RF Amplifier	Overview
Applications	High-power low-frequency RF susceptibility testing, conducted immunity drive, and laboratory RF power applications below 3 MHz.
Forced air self contained cooling	Type N front panel RF connectors
Technical Specifications	Rated Output Power: 800 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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PARAMETER	VALUE
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Primary Power Class	Universal AC mains multi kilowatt class
Form Factor	Benchtop self contained air cooled cabinet
Series Family	Amplifier Research 800A3A M1 through M3
Export Classification Class	EAR99 family class
Circuit Topology	Broadband solid state with output matching transformer
Power Class Sibling 800A3	800 watts minimum
Notes	
From Amplifier Research Model 800A3A OEM/rental product documentation. Compression figures align with the 800A3 family sheet; confirm any A-suffix deltas 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.