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Data Sheet

August 14, 2026

AMPLIFIER RESEARCH

Amplifier Research 100W1000M13

Amplifier Research 100W1000M13 Solid State RF Amplifier The Amplifier Research 100W1000M13 is an M13 configuration of the 100W1000 solid-state broadband amplifier family providing 100 W CW minimum from 80 MHz to 1000 MHz. OEM family sheets list Class A solid-state stages with digital local/remote control for EMC and lab RF power use. RF susceptibility and EMC drive, antenna/component testing, and wattmeter calibration through 1 GHz. Digital local and remote amplifier control The Amplifier Research 100W1000M13 is an M13 configuration of the 100W1000 solid-state broadband amplifier family providing 100 W CW minimum from 80 MHz to 1000 MHz. OEM family sheets list Class A solid-state stages with digital local/remote control for EMC and lab RF power use. RF susceptibility and EMC drive, antenna/component testing, and wattmeter calibration through 1 GHz. Digital local and remote amplifier control Frequency Response: 80 to 1000 MHz instantaneously



MODEL

**Amplifier Research
100W1000M13**

CALIBRATION

**Available on
request**

CONDITION

Used

STATUS

In stock

RFQ / SKU

100W1000M13

LISTING

<https://aumictechlabs.com/products/100w1000m13-3/>

NIST-traceable cal

SAM registered

30-day returns

NAICS 423690 • 811210 • 541380

This unit

The Amplifier Research 100W1000M13 is a solid-state, air-cooled RF power amplifier engineered for broadband applications demanding high gain and linear performance across the 0.8 to 1.0 GHz band. This 100 W minimum output amplifier delivers 50 dB power gain and operates from a typical 1 mW maximum input, making it suitable for EMC testing, communications, and radar system

integration. Push-pull circuitry in high-power stages minimizes distortion while maintaining stability across all load conditions.

Technical Specifications

- Frequency Range: 0.8 to 1.0 GHz (800 to 1000 MHz)
- Output Power: 100 W minimum
- Power Gain: 50 dB minimum
- Input for Rated Output: 1 mW maximum (typical)
- Gain Control: Available Automatic Level Control (ALC): Internal/external with front panel threshold adjustment
- Pulse Input Capability: Supported
- RF Connectors: Type N female
- Cooling: Forced air with self-contained fans
- Enclosure: Rack-mountable configuration

Key Features

- Mismatch tolerant - operates with any magnitude and phase of source and load impedance without damage or oscillation
- RF output level protection included
- Internal RF detector for self-testing and operational monitoring
- DC current level sensing and individual fusing of all output stages
- DC voltage sensing protection
- Front panel monitoring of forward and reflected power
- Keylock for local or remote operation control
- Safety interlock provision via rear panel connector

Typical Applications

- EMC testing and pre-compliance validation
- RF communications system characterization
- Radar and microwave system development
- Broadband signal amplification requiring linear operation

Compatibility & Integration

The amplifier integrates with standard RF test setups via Type N female connectors. Remote control capabilities support GPIB/IEEE-488 and RS-232 interfaces on applicable models. Digital control panel options provide menu-assigned softkeys, dedicated operation switches (POWER, STANDBY, OPERATE, FAULT/RESET), and rotary knob adjustment for precision gain and threshold tuning.

100W1000M13 Characteristics / Specifications

PARAMETER	VALUE
Rated Output Power	100 watts minimum
Frequency Response	80 to 1000 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 2.0 dB
Gain Adjustment Range Class	18 dB minimum class
Input Impedance Class	50 ohms VSWR 2.0:1 maximum
Output Impedance Class	50 ohms nominal
Mismatch Tolerance Class	Operate with reflected power limiting class
Harmonic Distortion Class	minus 20 dBc maximum near rated power
Modulation Capability Class	AM FM pulse faithful reproduction
Remote Interfaces Class	IEEE 488 and RS 232
Cooling	Forced air self contained fans
RF Connector Class	TypeNfemale
Form Factor	Portable self contained air cooled cabinet
Series Family	Amplifier Research 100W1000 80 to 1000 MHz
Configuration Code	M13
Primary Power Class	Universal AC mains class
Export Classification Class	EAR99 family class
Circuit Topology	Push pull solid state broadband stages
ALC Capability Class	Internal external ALC path class
Power Class Sibling 150W10	150 W minimum

100W1000M13 Specifications

PARAMETER	VALUE
Amplifier Research 100W1000M13 Solid State RF Amplifier	Overview
Applications	RF susceptibility and EMC drive, antenna/component testing, and wattmeter calibration through 1 GHz.
Key Features	M13 configuration of 100W1000 family
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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Circuit Topology	Push pull solid state broadband stages
ALC Capability Class	Internal external ALC path class
Power Class Sibling 150W1000	150 W minimum
Notes	
Rated power and frequency from Amplifier Research 100W1000 family OEM documentation for the M13 configuration. Confirm connector placement and mass on the M13 configuration row.	

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.