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Data Sheet

August 14, 2026

AMPLIFIER RESEARCH

Amplifier Research 10S1G4AM3

Amplifier Research 10S1G4AM3 Solid State Microwave Amplifier The Amplifier Research 10S1G4AM3 is a rack-oriented configuration of the 10S1G4A solid-state amplifier providing 10 W CW minimum from 0.7 GHz to 4.2 GHz. OEM product data list instantaneous broadband coverage, high gain, digital local/remote control, and forced-air cooling for wireless and EMC driver service. Low-power microwave susceptibility drive, wireless component testing, and swept RF power from 0.7 to 4.2 GHz in rack systems. Frequency Response: 0.7 to 4.2 GHz instantaneously The Amplifier Research 10S1G4AM3 is a rack-oriented configuration of the 10S1G4A solid-state amplifier providing 10 W CW minimum from 0.7 GHz to 4.2 GHz. OEM product data list instantaneous broadband coverage, high gain, digital local/remote control, and forced-air cooling for wireless and EMC driver service. Low-power microwave susceptibility drive, wireless component testing, and swept RF power from 0.7 to 4.2 GHz in rack systems. Frequency Response: 0.7 to 4.2 GHz instantaneously Input For Rated Output Class: 1.0 milliwatt maximum class



MODEL

**Amplifier Research
10S1G4AM3**

CALIBRATION

**Available on
request**

CONDITION

Used

STATUS

In stock

RFQ / SKU

10S1G4AM3

LISTING

<https://aumictechlabs.com/products/10s1g4am3-3/>

NIST-traceable cal

SAM registered

30-day returns

NAICS 423690 • 811210 • 541380

This unit

The Amplifier Research 10S1G4AM3 is a solid-state, self-contained, air-cooled broadband power amplifier engineered for RF applications requiring instantaneous bandwidth and high gain across

0.8 GHz to 4.2 GHz. This rack-mount variant (enclosure removed) delivers a minimum of 10 watts CW output with 40 dB typical gain and ± 1.5 dB flatness. The amplifier incorporates automatic level control to protect against RF input overdrive and thermal shutdown to prevent over-temperature damage. Third-order intercept point reaches 52 dBm typical, with harmonic distortion held to -20 dBc maximum at 15 watts. Input requires 0 dBm maximum for rated output. The front panel gain control permits reduction of 10 dB or greater. Digital control panel features status display, menu-assigned softkeys, rotary knob, and dedicated switches. Remote operation supported via IEEE-488 (GPIB) and RS-232 asynchronous full-duplex serial interface. Operating temperature 5°C to 40°C; relative humidity to 80% at 31°C, decreasing to 50% at 40°C. Altitude rating to 2000 m. Mains supply voltage stability within $\pm 10\%$ nominal. Dimensions 48.3 × 12.7 × 37.6 cm; weight 15.0 kg. Mismatch tolerance rated at 100% of output power without foldback; operates without damage or oscillation across any source and load impedance combination.

10S1G4AM3 Characteristics / Specifications

PARAMETER	VALUE
Rated Power Output	10 watts minimum
Frequency Response	0.7 to 4.2 GHz instantaneously
Input For Rated Output Class	1.0 milliwatt maximum class
Instrument Type	Solid state broadband microwave amplifier
Gain Class	High gain instantaneous bandwidth class
Form Factor	Rack mount M3 configuration
RF Connectors	TypeNfemale class
Remote Interfaces Class	IEEE 488 and RS 232 class
Cooling	Forced air self contained fans class
Primary Power Class	Universal AC selected automatically class
Mismatch Tolerance Class	100 percent rated power class
Modulation Capability Class	AM FM pulse faithful reproduction class
Harmonic Distortion Class	minus 20 dBc class near rated power
Series Family	10S1G4A
Display Class	Digital status and power display class
ALC Class	Internal leveling available class
Operating Temperature Class	Laboratory amplifier ambient class
Export Classification Class	EAR99 family class
Weight Class	Compact solid state amplifier weight class
Safety Interlock Class	Rear panel interlock class
Sample Ports Class	RF sample ports class
Gain Adjustment Class	Front panel and remote steps class
Bandwidth	class
Operating temperature	Class: Laboratory amplifier ambient class

10S1G4AM3 Specifications

PARAMETER	VALUE
Applications	Low-power microwave susceptibility drive, wireless component testing, and swept RF power from 0.7 to 4.2 GHz in rack systems.
Key Features	10 W CW 0.7 to 4.2 GHz
Digital control panel class	Remote IEEE 488 RS 232 class
Technical Specifications	Rated Power Output: 10 watts minimum

General Specifications & Supplementary Characteristics

PARAMETER	VALUE
Operating temperature	Class: Laboratory amplifier ambient class
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Operating Temperature Class	Laboratory amplifier ambient class
Export Classification Class	EAR99 family class
Weight Class	Compact solid state amplifier weight class
Safety Interlock Class	Rear panel interlock class
Sample Ports Class	RF sample ports class
Gain Adjustment Class	Front panel and remote steps class Notes From Amplifier Research 10S1G4A OEM/product documentation for the 10S1G4AM3 configuration. Confirm gain and compression watts on the unit datasheet revision.

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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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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NIST-traceable calibration · SAM registered ·
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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.