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Data Sheet
August 14, 2026

AMPLIFIER RESEARCH

Amplifier Research 25S1G4A

Amplifier Research 25S1G4A Solid State Microwave Amplifier The Amplifier Research 25S1G4A isaportable self-contained air-cooled solid-state amplifier providing 25 W CW minimum from 0.8 GHz to 4.2 GHz. OEM S1G4 family datasheets list ClassAbroadband stages, digital control, and remote IEEE-488/RS-232 operation. Wireless component driver service, multi-band RF susceptibility testing, and EMC applications needing undistorted modulation through 4.2 GHz. Solid state ClassAbroadband microwave design The Amplifier Research 25S1G4A isaportable self-contained air-cooled solid-state amplifier providing 25 W CW minimum from 0.8 GHz to 4.2 GHz. OEM S1G4 family datasheets list ClassAbroadband stages, digital control, and remote IEEE-488/RS-232 operation. Wireless component driver service, multi-band RF susceptibility testing, and EMC applications needing undistorted modulation through 4.2 GHz. Solid state ClassAbroadband microwave design Input For Rated Output: 1.0 milliwatt maximum

MODEL **Amplifier Research 25S1G4A**	CALIBRATION **Available on request**
CONDITION **Used**	STATUS **In stock**
RFQ / SKU **25S1G4A**	LISTING **https://aumictechlabs.com/products/25s1g4a-3/**

NIST-traceable cal · SAM registered · 30-day returns · NAICS 423690 · 811210 · 541380

This unit

The Amplifier Research 25S1G4A is a solid-state, air-cooled broadband amplifier designed for laboratory and bench applications requiring instantaneous bandwidth across 0.8 GHz to 4.2 GHz. This self-contained unit delivers a minimum of 25 watts of RF power with 44 dB minimum gain and ±1.5 dB typical flatness. The amplifier accepts a maximum input of 1.0 milliwatt for rated

output and provides continuous gain adjustment over a 10 dB minimum range with 4096 remote steps.Technical Specifications Frequency Range: 0.8 GHz to 4.2 GHz instantaneous Rated Power Output: 25 watts minimum Input for Rated Output: 1.0 mW maximum Power @ 3 dB Compression: 32 W nominal, 25 W minimum Power @ 1 dB Compression: 27 W nominal, 20 W minimum Gain (maximum setting): 44 dB minimum Gain Adjustment Range: 10 dB minimum with 4096 remote steps Flatness: ±1.5 dB typical, ±2.0 dB maximum Input Impedance: 50 ohms; VSWR 2.0:1 maximum Output Impedance: 50 ohms nominal Third Order Intercept (IP3): Determined using two tones spaced 1 MHz apart, typical for WCDMA systems Spurious: -73 dBc typical Modulation: Faithfully reproduces AM, FM, and pulse modulation Power Supply: 90–132 VAC or 180–264 VAC, 50/60 Hz single phase, 340 W maximumKey Features RF input leveling circuit protects first-stage amplifiers against overdrive when input exceeds 0 dBm Over-temperature protection removes DC voltage to amplifier stages upon cooling system failure 100% mismatch tolerance - operates without damage or oscillation under any load impedance condition Digital display indicates operational status and fault conditions Front panel gain control for local operation Removable from cabinet for benchtop or equipment rack mountingInterfaces and Control IEEE-488 (GPIB) control via 24-pin female connector RS-232 remote control via 9-pin Subminiature D female connector Local front panel adjustment and monitoring

25S1G4A Characteristics / Specifications

PARAMETER	VALUE
Rated Output Power	25 watts minimum
Input For Rated Output	1.0 milliwatt maximum
Frequency Response	0.8 to 4.2 GHz instantaneously
Gain At Maximum Setting	44 dB minimum
Gain Adjustment Range Class	10 dB minimum remote class
Flatness Maximum Class	plus or minus 2.0 dB
Input Impedance	50 ohms, VSWR 2.0:1 maximum class
Output Impedance	50 ohms nominal
Mismatch Tolerance	100 percent of rated power without foldback class
Harmonic Distortion Class	minus 20 dBc maximum near rated power
Spurious Typical Class	minus 73 dBc
Modulation Capability	Reproduces AM FM or pulse modulation on the input
Primary Power Class	Universal AC mains autoranging class
Remote Interfaces	IEEE 488 and RS 232
Cooling	Forced air self contained fans
RF Connectors Standard	TypeNfemale
Form Factor	Portable benchtop or rack without cabinet
Series Family	Amplifier Research S1G4 0.8 to 4.2 GHz
Power Class Sibling 50S1G4A	50 W minimum
Power Class Sibling 100S1G	100 W minimum
Export Classification Class	EAR99 family class
Circuit Topology	Push pull solid state broadband stages

25S1G4A Specifications

PARAMETER	VALUE
Key Features	Solid state Class A broadband microwave design
Forced air self contained cooling	Type N RF connector class
Technical Specifications	Rated Output Power: 25 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

Specifications

PARAMETER	VALUE
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Form Factor	Portable benchtop or rack without cabinet
Series Family	Amplifier Research S1G4 0.8 to 4.2 GHz
Power Class Sibling 50S1G4A	50 W minimum
Power Class Sibling 100S1G4	100 W minimum
Export Classification Class	EAR99 family class
Circuit Topology	Push pull solid state broadband stages

Notes
Rated power, frequency, and gain from Amplifier Research 25S1G4A / 25S1G4 family OEM documentation. Confirm compression table and mass on the specific M-configuration sheet.

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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