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Data Sheet

August 14, 2026

AMPLIFIER RESEARCH

Amplifier Research 60S1G3

Amplifier Research 60S1G3 Solid State Microwave Amplifier The Amplifier Research 60S1G3 is a solid-state self-contained air-cooled broadband amplifier providing 60 W CW minimum from 0.8 GHz to 3.0 GHz. OEM product literature lists front-panel gain control, RF input leveling above 0 dBm, and digital local/remote control via IEEE-488 or RS-232. Wireless component and subsystem testing across multiple bands, CDMA/W-CDMA/TDMA/GSM class driver service, and EMC tests needing undistorted modulation envelopes. The Amplifier Research 60S1G3 is a solid-state self-contained air-cooled broadband amplifier providing 60 W CW minimum from 0.8 GHz to 3.0 GHz. OEM product literature lists front-panel gain control, RF input leveling above 0 dBm, and digital local/remote control via IEEE-488 or RS-232. Wireless component and subsystem testing across multiple bands, CDMA/W-CDMA/TDMA/GSM class driver service, and EMC tests needing undistorted modulation envelopes. Solid state broadband design 0.8 to 3.0 GHz Frequency Response: 0.8 to 3.0 GHz instantaneously



MODEL

**Amplifier Research
60S1G3**

CALIBRATION

**Available on
request**

CONDITION

Used

STATUS

In stock

RFQ / SKU

60S1G3

LISTING

<https://aumictechlabs.com/products/60s1g3-3/>

NIST-traceable cal

SAM registered

30-day returns

NAICS 423690 · 811210 · 541380

This unit

The Amplifier Research 60S1G3 is a solid-state, air-cooled broadband microwave amplifier delivering 60 watts minimum RF power across 0.8 GHz to 3.0 GHz instantaneous bandwidth. Designed for benchtop operation or rack mounting, this self-contained unit combines high gain, linearity, and low spurious output to meet demanding RF and EMC test requirements. Technical

Specifications Frequency Range: 0.8 GHz – 3.0 GHz (instantaneous) Output Power: 60 W minimum CW; 70 W nominal at 3 dB compression; 60 W minimum at 3 dB compression; 60 W nominal at 1 dB compression; 50 W minimum at 1 dB compression Gain: 48 dB minimum at maximum setting; 10 dB minimum continuous adjustment range 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 Input for Rated Output: 1.0 milliwatt maximum Input Voltage: 90–132 VAC or 180–264 VAC, 50/60 Hz with automatic selection Key Features RF input leveling circuit protects against overdrive by limiting input to approximately 0 dBm Over-temperature protection removes DC voltage from RF stages upon cooling blockage or fan failure Front-panel gain control for convenient output adjustment Digital display indicates operational status and fault conditions Switching power supplies with built-in AC circuit breaker Both local (front-panel) and remote control via IEEE-488 (GPIB) and RS-232 Typical Applications Driver amplifier for wireless and communication component testing EMC testing where undistorted modulation envelopes are critical Bench-top RF measurements requiring instantaneous wideband coverage Compatibility & Integration Remote control and monitoring via IEEE-488 (GPIB) or RS-232 interfaces enable integration into automated test systems. Benchtop cabinet and rack-mountable configurations support flexible laboratory and production test setups.

60S1G3 Characteristics / Specifications

PARAMETER	VALUE
Rated Output Power	60 watts minimum
Frequency Response	0.8 to 3.0 GHz instantaneously
Input For Rated Output Class	1.0 milliwatt maximum
Gain At Maximum Setting Class	48 dB minimum class
RF Input Leveling Threshold	Above 0 dBm into first stage
Input Impedance Class	50 ohms
Output Impedance Class	50 ohms nominal
Mismatch Tolerance Class	Operate without damage into severe VSWR class
Modulation Capability Class	AM FM pulse faithful reproduction
Harmonic Distortion Class	minus 20 dBc maximum near rated power
Remote Interfaces	IEEE 488 and RS 232
Cooling	Forced air self contained fans
Form Factor	Benchtop cabinet removable for rack mounting
Protection Over Temperature	Removes DC voltage to RF stages
Protection Overdrive	RF input leveling circuit
Display	Digital operate status and fault indication
Series Family	Amplifier Research S1G3 0.8 to 3.0 GHz
Primary Power Class	Universal AC mains class
Export Classification Class	EAR99 family class
Circuit Topology	Solid state broadband stages
Spurious Typical Class	Low spurious ClassA driver class
ALC Capability Class	Gain control with input leveling class

60S1G3 Specifications

PARAMETER	VALUE
Key Features	Solid state broadband design 0.8 to 3.0 GHz
Front panel continuous gain control	RF input leveling above 0 dBm
Over temperature DC stage shutdown	IEEE 488 and RS 232 digital remote
Technical Specifications	Rated Output Power: 60 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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Notes	
Rated power and frequency from Amplifier Research Model 60S1G3 OEM product documentation. Confirm compression, exact gain, and mass on the unit datasheet revision.	

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.