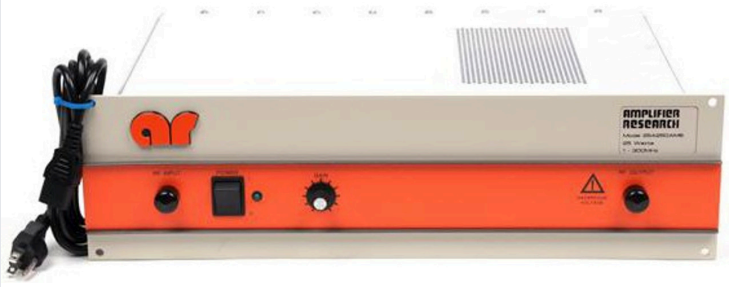
Aumictech
Test & measurement · bought, sold, repaired, calibrated

Data Sheet
August 14, 2026

AMETEK / AMPLIFIER RESEARCH

Ametek / Amplifier Research 25A250AM6 Amplifier

Amplifier Research 25A250AM6 Solid State RF Amplifier The Amplifier Research 25A250AM6 isaself-contained air-cooled solid-state broadband amplifier providing 25 W CW minimum from 10 kHz to 250 MHz. OEM 25A250AM6 catalog and datasheet materials list instantaneous bandwidth, high gain, mismatch tolerance, and IEEE-488/RS-232 remote interfaces on the A250 platform. RF susceptibility testing, antenna and component testing, wattmeter calibration, and broadband driver service from 10 kHz to 250 MHz. Forward and reflected power monitoring class The Amplifier Research 25A250AM6 isaself-contained air-cooled solid-state broadband amplifier providing 25 W CW minimum from 10 kHz to 250 MHz. OEM 25A250AM6 catalog and datasheet materials list instantaneous bandwidth, high gain, mismatch tolerance, and IEEE-488/RS-232 remote interfaces on the A250 platform. RF susceptibility testing, antenna and component testing, wattmeter calibration, and broadband driver service from 10 kHz to 250 MHz. Forward and reflected power monitoring class Safety interlock rear panel connector class



MODEL **Ametek / Amplifier Research 25A250AM6**	CALIBRATION **Available on request**
CONDITION **Used**	STATUS **In stock**
RFQ / SKU **25A250AM6**	LISTING **https://aumictechlabs.com/products/25a250am6-3/**

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

This unit

The Ametek Amplifier Research 25A250AM6 is a broadband RF power amplifier engineered for laboratory test and measurement applications demanding instantaneous bandwidth, high gain, and moderate power output across a wide frequency range. Built on push-pull MOSFET circuitry, it delivers lower distortion and improved stability while operating reliably into any load impedance without risk of damage. The amplifier faithfully reproduces AM, FM, and pulse modulation on input signals, making it suitable for RF susceptibility testing, antenna and component characterization, watt meter calibration, and as a driver stage for higher power amplifier systems.Technical Specifications Power Output 25 W minimum 32 W nominal at 3 dB compression 20 W nominal at 1 dB compression P1dB: 41.76 to 43.01 dBm (15 to 20 W) IP3: 54 dBm Frequency Response & Impedance Instantaneous bandwidth: 10 kHz to 250 MHz Input impedance: 50 ohms Output impedance: 50 ohms nominal VSWR: 1.5:1 maximum Gain & Linearity Gain (maximum setting): 44 dB minimum; 61 dB high range Gain flatness: ±1.0 dB maximum Harmonics: 20 dBc Input for rated output: 1.0 mW maximum Power Supply & Thermal Switching power supply with universal auto-ranging input: 90–135 VAC or 180–270 VAC, 47–63 Hz Power consumption: 200 W maximum Physical Dimensions: 48.3 × 13.2 × 28.7 cm (19.0 × 5.2 × 11.3 in) Weight: 15.9 kg (35.0 lb) RF connectors: Type N female (front panel input)Key Features Unconditional stability into any load impedance ±1.0 dB gain flatness across operating bandwidth Modulation-capable design supporting AM, FM, and pulse signals Universal mains input eliminates regional power supply requirementsTypical Applications RF susceptibility and immunity testing Antenna and RF component characterization Watt meter calibration and verification Driver amplifier for higher power systemsCompatibility & Integration Type N female connectors on input and output ensure standard 50 ohm laboratory connectivity. Load-immune operation enables use with complex or mismatched loads without performance degradation or equipment damage.

25A250AM6 Characteristics / Specifications

PARAMETER	VALUE
Rated Output Power	25 watts minimum
Input For Rated Output	1.0 milliwatt maximum
Frequency Response	10 kHz to 250 MHz instantaneously
Gain At Maximum Setting	44 dB minimum
Gain Adjustment Continuous Range	18 dB minimum class remote stepped
Flatness Class	plus or minus 1.5 to 3.0 dB class by model family sheet
Power Output At Compression Class	see model datasheet P1dB and P3dB rows
Input Impedance	50 ohms, VSWR 2.0:1 maximum class
Output Impedance	50 ohms nominal
Mismatch Tolerance	operates without damage into high VSWR loads class
Modulation Capability	Faithful AM FM pulse reproduction
Harmonic Distortion Class	minus 20 dBc class at rated power family
Remote Interfaces	IEEE-488 and RS-232
RF Connector Class	TypeNfemale class
Cooling	Forced air self contained fans
Form Factor	Portable benchtop or rack amplifier class
Series Family	Amplifier Research 25A250AM6
Export Classification Class	EAR99 family class
Primary Power Class	universal AC mains auto ranging class
ALC Leveling	available class
Safety Interlock	rear panel interlock class
Configuration Suffix	AM6

25A250AM6 Specifications

PARAMETER	VALUE
Amplifier Research 25A250AM6 Solid State RF Amplifier	Overview
Applications	RF susceptibility testing, antenna and component testing, wattmeter calibration, and broadband driver service from 10 kHz to 250 MHz.
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
Rated Output Power	25 watts minimum
Input For Rated Output	1.0 milliwatt maximum
Frequency Response	10 kHz to 250 MHz instantaneously
Gain At Maximum Setting	44 dB minimum
Gain Adjustment Continuous Range	18 dB minimum class remote stepped
Flatness Class	plus or minus 1.5 to 3.0 dB class by model family sheet
Power Output At Compression Class	see model datasheet P1dB and P3dB rows
Input Impedance	50 ohms, VSWR 2.0:1 maximum class
Output Impedance	50 ohms nominal
Mismatch Tolerance	operates without damage into high VSWR loads class
Modulation Capability	Faithful AM FM pulse reproduction
Harmonic Distortion Class	minus 20 dBc class at rated power family
Remote Interfaces	IEEE-488 and RS-232
RF Connector Class	TypeNfemale class
Cooling	Forced air self contained fans
Form Factor	Portable benchtop or rack amplifier class
Series Family	Amplifier Research 25A250AM6
Export Classification Class	EAR99 family class
Primary Power Class	universal AC mains auto ranging class
ALC Leveling	available class
Safety Interlock	rear panel interlock class
Configuration Suffix	AM6

Notes
Rated power, band, and gain from Amplifier Research 25A250AM6 OEM catalog/datasheet summaries. Quote the exact configuration sheet for compression flatness mass and primary-power draw; do not assume sibling compression rows.

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
788 S 500 E, Pleasant Grove, UT 84062
sales@aumictech.com · +1 (484) 841-9341
https://aumictechlabs.com

NIST-traceable calibration · SAM registered · 30-day returns
NAICS 423690 · 811210 · 541380
Generated August 14, 2026