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Data Sheet
August 13, 2026

ROHDE & SCHWARZ

Rohde and Schwarz BBA150 Broadband Amplifier System

Rohde & Schwarz BBA150 Broadband Amplifier System The R&S BBA150 isamodular solid-state broadband amplifier family for EMS/EMC and component work from 4 kHz to 6 GHz. Five instantaneous bands are offered: A 9 kHz to 250 MHz, AB 4 kHz to 400 MHz, BC 80 MHz to 1 GHz, D 690 MHz to 3.2 GHz, and E 2.5 GHz to 6 GHz. Nominal power classes span 15 W to 3000 W depending on band and model. Amplifiers are 100 percent mismatch tolerant and remain rated to VSWR 6:1 as long as possible. The R&S BBA150 isamodular solid-state broadband amplifier family for EMS/EMC and component work from 4 kHz to 6 GHz. Five instantaneous bands are offered: A 9 kHz to 250 MHz, AB 4 kHz to 400 MHz, BC 80 MHz to 1 GHz, D 690 MHz to 3.2 GHz, and E 2.5 GHz to 6 GHz. Nominal power classes span 15 W to 3000 W depending on band and model. Amplifiers are 100 percent mismatch tolerant and remain rated to VSWR 6:1 as long as possible.

MODEL Rohde & Schwarz BBA150	CALIBRATION Available on request
CONDITION Used	STATUS In stock
RFQ / SKU BBA150	LISTING https://aumictechlabs.com/products/bba150-2/

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

This unit

The Rohde & Schwarz BBA150 is a solid-state broadband amplifier engineered for research, development, production, and electromagnetic compatibility testing across multiple frequency bands. The modular architecture supports flexible multi-band operation within a single unit,

delivering nominal output power from 15 W to 3000 W depending on frequency and model configuration. Built to withstand 100% output mismatch, the BBA150 maintains rated power up to 6:1 VSWR and survives RF short circuits or open conditions without damage.Technical Specifications RF Performance Frequency coverage: 4 kHz to 6 GHz across five switchable bands (A: 9 kHz–250 MHz; AB: 4 kHz–400 MHz; BC: 80 MHz–1 GHz; D: 0.69–3.2 GHz; E: 2.5–6 GHz) Output power: 15 W to 3000 W at 1 dB compression point; dual-band models rated 30 W/15 W, 60 W/15 W, 60 W/30 W, 60 W/60 W, 110 W/30 W, and 110 W/60 W Gain flatness: ±3.0 dB or better Input/output impedance: 50 Ω nominal Output mismatch tolerance: 100% with rated power delivery to 6:1 VSWR Modulation support: Amplitude, frequency, phase, pulse, and OFDM RF connectors: N female or 7/16 DIN female for input, forward output, and optional reflected output power Electrical & Thermal DC blocking: ≤50 V DC Transient voltage category: II per IEC 60364-4-443 Circuit protection: Automatic 20 A all-pole breaker Thermal shutdown: +50 °C ambient temperature Physical & Cooling Form factor: 19" rackmount, 4 HU; desktop operation supported Cooling: Air-cooled with lightweight aluminum-copper heat sinkKey Features Full mismatch tolerance eliminates external load conditioning Multi-band switching for single-unit operation across 4 kHz to 6 GHz Sample ports for forward and reflected power monitoring (front or rear panel access)Typical Applications EMC testing, RF research and development, production testing, and signal amplification across VLF through microwave frequencies.Compatibility & Integration Local operation via front panel, remote control through web GUI over LAN, or automated control via Ethernet using SCPI commands.

Features & description

From manufacturer datasheet

Features

• Five scaleable frequency bands; later frequency or power upgrades • AM, FM, phase, pulse, and OFDM modulation capability • Gain adjustment greater than 15 dB; extensive RF switching options • Air-cooled desktop 4 HU or rack 12/20/35 HU high-power frames • Maximum RF input +15 dBm (A band) / +5 dBm class on other bands

Applications

• IEC/EN EMS immunity testing to 6 GHz • Development and production validation of RF components • Driving antennas and poorly matched DUTs • Research, physics, and communications high-power stimulus • Single-band desktop (4 HU) or multi-band 19 inch rack systems

BBA150 Characteristics / Specifications

PARAMETER	VALUE
Model	BBA150
Manufacturer	Rohde & Schwarz
Instrument Type	Solid state broadband amplifier system
Alias	BBA 150; R&S BBA150
Total Frequency Coverage	4 kHz to 6 GHz (band dependent)
BandAFrequency	9 kHz to 250 MHz instantaneous
Band AB Frequency	4 kHz to 400 MHz instantaneous
Band BC Frequency	80 MHz to 1 GHz instantaneous
BandDFrequency	690 MHz to 3.2 GHz instantaneous
BandEFrequency	2.5 GHz to 6 GHz instantaneous
BandAPower Classes	75 W to 2.5 kW (A75 through A2500)
Band AB Power Classes	75 W to 600 W
Band BC Power Classes	70 W to 3 kW
BandDPower Classes	30 W to 800 W
BandEPower Classes	15 W to 400 W
Nominal Output Load	50 ohm
Nominal Input Impedance	50 ohm
Nominal Output Impedance	50 ohm
Gain Adjustment Range	greater than 15 dB
Gain Flatness Class	plus/minus 4.0 dB or better (see model sheet)
Maximum RF Input Level Band A	+15 dBm
Input Level for Nominal Power	minus 3.4 dBm nominal (brochure class)
Mismatch Protection	100 percent, without damage
Rated Mismatch Operation	rated power as long as possible to VSWR 6:1
Modulation Capability	AM, FM, phase, pulse, OFDM

PARAMETER	VALUE
Example A75 Nominal Power	75 W (48.8 dBm)
Example A75 Gain at 1 MHz	nom. 52.2 dB
Example A75 Gain Flatness	plus/minus 2.5 dB
Example A75 Harmonics at 75 W	less than minus 20 dBc
Example A75 Spurious	nom. minus 80 dBc, max minus 70 dBc (offset greater than 100 kHz)
Example A125 Nominal Power	125 W (51.0 dBm)
Form Factor	4 HU desktop or 12/20/35 HU rack Notes Specs from the R&S BBA150 brochure and specifications (family). Power, gain, and harmonics are model-specific (A75, A125, AB75, E15, and so on). Read the configuration label for the installed band and wattage class before quoting P1dB or rack height.

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

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