

KEYSIGHT TECHNOLOGIES (AGILENT HP)

435B

The Keysight (formerly Agilent / HP) 435B is a classic, highly reliable analog RF and microwave power meter. It is designed to work seamlessly with the 8480 series of power sensors, offering precise measurements over a wide frequency and power range. Renowned for its low noise, automatic zeroing capability, and optional portable battery operation, the 435B remains an industry icon for analog RF power measurement.

SPECIFICATIONS

General

Interfaces	Analog Recorder Output (rear panel BNC); no digital programming interfaces
Display	Analog d'Arsonval meter with dual-scale (0 to 10 & 0 to 3) and dBm scale (-10 to +3)

Physical

Power Supply	100/120/220/240 V AC (+5% to -10%), 48 to 66 Hz and 360 to 440 Hz, < 10 W; rechargeable battery optional (Option 001)
Operating Temperature	0 to 55 °C °C
Dimensions (W×H×D)	134 mm × 155 mm × 279 mm mm
Weight	2.6 kg (standard, without battery) kg
Cabinet Style	HP System II 1/3-rack

Measurement Capabilities

Number of Channels	1
Frequency Range	100 kHz to 110 GHz (sensor dependent)
Power Measurement Range	-70 dBm to +44 dBm (sensor dependent)

Measurement Accuracy and Calibration

Instrumentation Accuracy	±1% of full scale on all ranges
Internal Calibration Source Frequency	50 MHz
Internal Calibration Source Power Output	1.00 mW (0 dBm)
Internal Calibration Source Uncertainty	±0.7% (traceable to National Standards)
Internal Calibration Source Connector	Type N (female) on front panel
Zeroing	Manual zeroing via front-panel knob

Sensor Compatibility and Connection

Compatible Sensor Families	8480 Series Power Sensors
Supported Cable Lengths	Up to 61 m (200 ft)
Calibration Factor Control	85% to 100% in 1% steps via front-panel dial

User Interface and Display

Meter Response Time	Fast (approx. 100 ms) or Slow (approx. 2.5 s) switch-selectable
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System Connectivity and Interfaces

Recorder Output Voltage	0 to 1.0 VDC into open circuit (proportional to meter deflection)
Recorder Output Impedance	1 kΩ nominal

Physical and Power Specifications

Power Consumption	< 10 W (AC operation)
Battery Option Availability	Available as Option 001 (internal rechargeable pack)

Environmental and Compliance

Storage Temperature Range	-40 °C to +75 °C (excluding battery)
Relative Humidity Limit	95% R.H. at 40 °C

Display

Meter Scales	dBm (-10 to +3) and linear (0 to 1.0 and 0 to 3.0)
Meter Movement Type	Taut-band, mirror-backed

Power

Option 001 Battery Operating Time	Up to 16 hours
Option 001 Battery Recharge Time	16 hours (instrument off), 24 hours (instrument on)
AC Line Frequency Range	48 to 66 Hz and 360 to 440 Hz

Inputs & Outputs

Input Connector Location Options	Front panel (standard), Rear panel (Option 002)
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Reference Oscillator

Reference Oscillator Impedance	50 Ω (75 Ω with Option 003)
Reference Oscillator SWR	< 1.05

Performance

Zero Carryover	< ±0.5% of full scale when zeroed on the most sensitive range
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TECHNOLOGY

RF & Microwave Power Measurement (Analog)

APPLICATIONS

Analog RF Power Measurement, Sensor Calibration, Field Testing

Generated by SpecAtlasHub (specatlashub.com). Specifications are compiled from available sources and are subject to change — verify critical values against the manufacturer before purchase.