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Data Sheet
August 14, 2026

AGILENT / KEYSIGHT

Agilent/Keysight 8151A – Optical Multimeter

Agilent Keysight 8151A Optical Pulse Power Meter The HP 8151A is an optical pulse power meter for measuring peak and pulse optical power on fiber systems. OEM 8151A literature lists pulse-optical-power measurements with compatible 815xx optical heads, HP-IB, and use with 8152A average-power meters in lightwave benches. Peak-power measurements on optical transmitters and pulsed fiber sources where average-power meters under-read duty-cycle-dependent power. Pulse/peak optical power (vs 8152A average) The HP 8151A is an optical pulse power meter for measuring peak and pulse optical power on fiber systems. OEM 8151A literature lists pulse-optical-power measurements with compatible 815xx optical heads, HP-IB, and use with 8152A average-power meters in lightwave benches. Peak-power measurements on optical transmitters and pulsed fiber sources where average-power meters under-read duty-cycle-dependent power. Pulse/peak optical power (vs 8152A average) Instrument Type: Optical pulse power meter

MODEL **Agilent / Keysight 8151A**	CALIBRATION **Available on request**
CONDITION **Used**	STATUS **In stock**
RFQ / SKU **8151A**	LISTING **https://aumictechlabs.com/products/8151a-2/**

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NAICS 423690 · 811210 · 541380

This unit

The Agilent/Keysight 8151A Optical Multimeter measures peak and average optical power in fiber optic components, modules, and systems. It characterizes signal amplitude, mean power, and extinction ratio, with direct electrical output corresponding to the optical input waveform. Operation requires a separate optical head (81511A or 81512A), enabling wavelength coverage

from 550 nm to 1725 nm.Technical Specifications Measurement & Resolution Peak and average optical power Amplitude, mean power, and extinction ratio O/E transducer capability with 250 MHz transducer frequency range Power resolution: 3 digits (1 pW minimum) in watts; 4 digits (0.01 dB minimum) in dB Analog Output Bandwidth: DC to 300–1000 Hz (depending on range and optical head) Output voltage: 0–2 V into open circuit Output impedance: 600 Ω typical Maximum input voltage: ±10 V Output attenuation: 0 dB to 6 dB in 0.1 dB steps All output signals: pulse-shaped, 50% duty cycle Internal Modulation Selectable frequencies: 270 Hz, 1 kHz Optical Heads (sold separately) 81511A: 550–950 nm (calibrated 850 nm), +10 dBm to -60 dBm, 200 µm maximum core 81512A: 900–1725 nm (calibrated 1300 nm), 0 dBm to -50 dBm, 100 µm maximum coreKey Features Interchangeable optical heads enable wavelength flexibility from 550 to 1725 nm HP-IB interface support with standard functions (SH1, AH1, T6, L4, SR1, RL1, PP0, DC1, DT1, CO) Wide measurement dynamic range across both visible and near-infrared bands Direct transducer output for external signal analysisPhysical & Environmental Main unit: 140 mm H × 220 mm W × 530 mm D; 8 kg net Operating temperature: 0°C to +55°C Storage temperature: -40°C to +70°C Humidity: 95% RH (0°C to +40°C) Power: 100/120/220/240 Vrms ±5%, 48–66 Hz, 100 VA maximumCompatibility & Integration HP-IB remote control enables integration with automated test systems. Optical head selection determines wavelength range and measurement dynamic range for specific applications.

8151A Characteristics / Specifications

PARAMETER	VALUE
Instrument Type	Optical pulse power meter
Series Family	HP 8151A / 8152A optical power meters
Measurement	pulse / peak optical power
Sibling 8152A	optical average power meter
Heads	compatible 815xx optical sensor heads
Remote Interface	HP-IB
Application	optical transmitter pulse-power characterization
Form Factor	benchtop optical power meter mainframe
Documentation	HP 8151A optical pulse power meter operating literature
Display	numeric pulse-power readout
Wavelength	determined by the connected optical head
Connector	optical head interface, notabare fiber input on the mainframe
Operating Environment	laboratory ambient per 8151A manual
Power	AC mains operated
Calibration	head-plus-mainframe calibration per 8151A procedure
Dynamic Range	see 8151A plus head specification table
Pulse Width Range	see 8151A specification table (do not invent ns)
Accuracy	see 8151A plus head table (do not invent dB)
Related 8156A	optical attenuator in the same 815x lightwave bench family
Verification	sensor-head model determines wavelength and power range

8151A Specifications

PARAMETER	VALUE
Agilent Keysight 8151A Optical Pulse Power Meter	Overview
Key Features	Pulse/peak optical power (vs 8152A average)
Technical Specifications	Instrument Type: Optical pulse power meter

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 On Heads: 81511A-class heads have separate OEM files in this project
Use: peak power of pulsed optical signals
Interface To Dut: fiber via the optical head adapter

Notes
8151A pulse/peak optical power meter identity and 8152A sibling from HP 8151A/8152A lightwave power-meter literature. Wavelength, power range, and accuracy are on the connected 815xx head specification table.

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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