


Aumictech

Test & measurement · bought, sold, repaired, calibrated

Data Sheet

August 14, 2026

AGILENT / KEYSIGHT

Agilent/Keysight 8153A Lightwave Multimeter Mainframe

Agilent HP 8153A Lightwave Multimeter Mainframe The HP/Agilent 8153A is a lightwave multimeter mainframe hosting optical power and return-loss modules for fiber optic measurements. Optical power and loss measurements in fiber component and link testing. Instrument Type: Lightwave multimeter mainframe The HP/Agilent 8153A is a lightwave multimeter mainframe hosting optical power and return-loss modules for fiber optic measurements. Optical power and loss measurements in fiber component and link testing. Instrument Type: Lightwave multimeter mainframe Measurements: optical power loss return loss class with modules



MODEL

**Agilent / Keysight
8153A**

CALIBRATION

**Available on
request**

CONDITION

Used

STATUS

In stock

RFQ / SKU

8153A

LISTING

<https://aumictechlabs.com/products/8153a-2/>

NIST-traceable cal

SAM registered

30-day returns

NAICS 423690 · 811210 · 541380

This unit

The Agilent/Keysight 8153A Lightwave Multimeter Mainframe is a modular optical test instrument designed for power and wavelength measurements across telecommunications and research applications. The mainframe accommodates one or two plug-in modules from the 815xx series, including DFB lasers, LED sources, Fabry-Perot laser sources, power meters, and electrical power sensors. Dual-channel architecture enables simultaneous measurements on independent channels, each with a six-digit main display and eight-character auxiliary display. The instrument

measures optical power from +30 dBm to -110 dBm (1000.00 mW to 0.01 pW) with calibration factor adjustment of ± 200.000 dB and reference capability of ± 200.000 dBm/dB. Data acquisition supports up to 500 measurement results per channel with selectable averaging times from 20 ms to 60 minutes and total acquisition windows extending to 99:59:59 hours. Analog output bandwidth spans DC to 300–1000 Hz depending on range and optical head, with 0–2 V into open circuit and 600 Ω typical output impedance. Power sensor modules deliver sensitivities from -70 dBm down to -110 dBm across the 450 nm to 1700 nm wavelength range. External optical heads support power levels from +27 dBm to -90 dBm. Source modules feature variable attenuation from 0 dB to 6 dB in 0.1 dB increments with selectable internal digital modulation at 270 Hz or 1 kHz. GPIB interface with full SCPI command support enables programmable control of modes and parameters, transferring single measurement results in 20 ms and 100 stored results in under 800 ms. AC power input rated 100–240 Vrms ($\pm 10\%$), 48–66 Hz, 35 VA maximum; optional DC input 12 V to 30 V available. Compact form factor: 89 mm H $\times$ 212.3 mm W $\times$ 355 mm D, weighing 2.5 kg net.

8153A Characteristics / Specifications

PARAMETER	VALUE
Instrument Type	Lightwave multimeter mainframe
Series Family	HP Agilent 8153A
Role	hosts optical measurement modules
Measurements	optical power loss return loss class with modules
Remote Interface	GPIB
Display	optical power display
Form Factor	benchtop mainframe
Use Stage	optical lab production
Modules	compatible 815xx optical heads/sensors
Wavelength Entry	set cal wavelength for sensors
Units	dBmW Averaging: digital averaging class
Zeroing	dark zero
Calibration	module/sensor calibration
Application Class	fiber optic test
Channels	module dependent
Triggering	GPIB synchronized measurements class
Accessories	sensor heads adapters
Documentation	8153A operating manual
Family Peers	8152A optical multimeters
Successor Platforms	8163 8164 lightwave mainframes
Power Reference	absolute optical power with calibrated heads
Return Loss	with appropriate modules/sources
Environment	lab optical test
Configuration Note	sensor accuracy comes from installed optical head datasheets

8153A Specifications

PARAMETER	VALUE
Agilent HP 8153A Lightwave Multimeter Mainframe	Overview
GPIB automation	dBm and watt optical readouts
Technical Specifications	Instrument Type: Lightwave multimeter mainframe

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
Instrument Type	Lightwave multimeter mainframe
Series Family	HP Agilent 8153A
Role	hosts optical measurement modules
Measurements	optical power loss return loss class with modules
Remote Interface	GPIB
Display	optical power display
Form Factor	benchtop mainframe
Use Stage	optical lab production
Modules	compatible 815xx optical heads/sensors
Wavelength Entry	set cal wavelength for sensors
Units	dBmWAveraging: digital averaging class
Zeroing	dark zero
Calibration	module/sensor calibration
Application Class	fiber optic test
Channels	module dependent
Triggering	GPIB synchronized measurements class
Accessories	sensor heads adapters
Documentation	8153A operating manual
Family Peers	8152A optical multimeters
Successor Platforms	8163 8164 lightwave mainframes
Power Reference	absolute optical power with calibrated heads
Return Loss	with appropriate modules/sources
Environment	lab optical test
Configuration Note	sensor accuracy comes from installed optical head datasheets

Notes

Identity rows from HP/Agilent 8153A Lightwave Multimeter literature. Module/sensor numeric accuracy must be taken from the installed head datasheet.

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

Technical content from manufacturer specifications. Unit photo/stock from Aumictech listing when available. Specifications subject to OEM documentation and unit condition.