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Data Sheet

August 14, 2026

AGILENT / KEYSIGHT

Agilent/Keysight 8145A – Optical Time Domain Reflectometer

Dynamic Range 1550 Nm: 26 dB at 1550 nm, whether or not the 1300 nm module is installed

Application: field maintenance and bench OTDR Documentation: HP/Agilent 8145A OTDR

product literature Measurement: backscatter traces, splice loss, reflectance, fiber length

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Operating Environment: field and laboratory ambient per 8145A manual



MODEL

**Agilent / Keysight
8145A**

CALIBRATION

**Available on
request**

CONDITION

Used

STATUS

In stock

RFQ / SKU

8145A

LISTING

<https://aumictechlabs.com/products/8145a-2/>

NIST-traceable cal

SAM registered

30-day returns

NAICS 423690 • 811210 • 541380

This unit

The Agilent/Keysight 8145A is an Optical Time Domain Reflectometer engineered for field maintenance and benchtop fiber characterization. It employs data correlation techniques to deliver dynamic range exceeding 28 dB at 1300 nm and 26 dB at 1550 nm, enabling rapid event detection and splice loss measurement across extended fiber spans. Technical Specifications Dynamic range: >28 dB (1300 nm), 26 dB (1550 nm) Wavelength options: 1300 nm, 1550 nm, or 1301 nm & 1539 nm Event detection: Up to 100 reflective and non-reflective events in <7 seconds Minimum detectable splice loss: 0.05 dB Event dead zone: 3 m Attenuation dead zone: 30 m or 40 m (module dependent) Distance accuracy: $\pm 0.5 \text{ m} \pm \text{sample spacing} \pm \text{measurement distance} \times$

10⁻⁴ Measurement span: 1 to 200 km Display: Monochrome green CRT Power consumption: ~80 W AC input: 100–120 V or 230–240 V (IEC C13) DC input: 12–30 V (2-pin female socket)Key Features Configurable wavelength modules for diverse fiber types and applications Onboard memory module stores up to 100 traces Softkey-guided menu navigation Lightweight (13 kg) and rugged construction for field deployment Dimensions: 340 mm (W) × 190 mm (H) × 460 mm (D)Typical Applications Field troubleshooting and acceptance testing of installed fiber optic cables. Laboratory characterization of splice losses, connectors, and fault location on long-haul links.Compatibility & Integration Supports GPIB (IEEE-488) for remote control and data transfer. HP81450A Memory module provides local trace storage. Agilent E6009A Toolkit III Software processes OTDR traces and generates acceptance documentation aligned with Bellcore/Telcordia GR-196/SR4731 standards. External printers and plotters connect via GPIB for hard-copy reporting.

8145A Characteristics / Specifications

PARAMETER	VALUE
Instrument Type	Optical time domain reflectometer
Series Family	HP 8145A / 8146A OTDR
Fiber Type	single-mode
Wavelength Option 0	1300/1550 nm dual
Dynamic Range 1300 Nm	greater than 28 dB at 1300 nm (data-correlation technique)
Dynamic Range 1550 Nm	26 dB at 1550 nm, whether or not the 1300 nm module is installed
Remote Interface	HP-IB
Application	field maintenance and bench OTDR
User Interface	softkey-guided menu
Form Factor	rugged lightweight OTDR
Documentation	HP/Agilent 8145A OTDR product literature
Measurement	backscatter traces, splice loss, reflectance, fiber length
Display	OTDR trace display
Operating Environment	field and laboratory ambient per 8145A manual
Power	AC mains; field-use supply per 8145A options
Successor	8146A OTDR
Connector	user optical interface (81000xl class)
Pulse Widths	see 8145A specification table (do not invent ns)
Event Dead Zone	see 8145A specification table
Attenuation Dead Zone	see 8145A specification table
Verification	confirm installed 002/003/023 module set on the option label
Attenuation	Dead Zone: see 8145A specification table

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	Optical time domain reflectometer
Series Family	HP 8145A / 8146A OTDR
Fiber Type	single-mode
Wavelength Option 002	1300 nm
Wavelength Option 003	1550 nm
Wavelength Option 023	1300/1550 nm dual
Dynamic Range 1300 Nm	greater than 28 dB at 1300 nm (data-correlation technique)
Dynamic Range 1550 Nm	26 dB at 1550 nm, whether or not the 1300 nm module is installed
Remote Interface	HP-IB
Application	field maintenance and bench OTDR
User Interface	softkey-guided menu
Form Factor	rugged lightweight OTDR
Documentation	HP/Agilent 8145A OTDR product literature
Measurement	backscatter traces, splice loss, reflectance, fiber length
Display	OTDR trace display
Operating Environment	field and laboratory ambient per 8145A manual
Power	AC mains; field-use supply per 8145A options
Successor	8146A OTDR
Connector	user optical interface (81000xI class)
Pulse Widths	see 8145A specification table (do not invent ns)
Event Dead Zone	see 8145A specification table
Attenuation Dead Zone	see 8145A specification table
Verification	confirm installed 002/003/023 module set on the option label
Notes	
28 dB at 1300 nm / 26 dB at 1550 nm dynamic range and Option 002/003/023 from HP/Agilent 8145A OTDR product	

summaries (data-correlation technique note). Pulse-width and dead-zone tables are in the 8145A specification chapter.

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

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