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Data Sheet

August 14, 2026

AGILENT / KEYSIGHT

Agilent/Keysight 81623A Optical Power Head

Agilent Keysight 81623A Optical Power Head The Agilent/Keysight 81623A is an optical power sensor head for 8153/8163-class lightwave multimeters used for calibrated optical power measurements. Absolute optical power measurements in fiber component and transceiver test. Pairs with lightwave multimeter mainframes The Agilent/Keysight 81623A is an optical power sensor head for 8153/8163-class lightwave multimeters used for calibrated optical power measurements. Absolute optical power measurements in fiber component and transceiver test. Pairs with lightwave multimeter mainframes Host Instruments: 8153 8163 8164 class lightwave meters



MODEL

**Agilent / Keysight
81623A**

CALIBRATION

**Available on
request**

CONDITION

Used

STATUS

In stock

RFQ / SKU

81623A

LISTING

<https://aumictechlabs.com/products/81623a-2/>

NIST-traceable cal

SAM registered

30-day returns

NAICS 423690 • 811210 • 541380

This unit

The Agilent/Keysight 81623A Optical Power Head is a germanium-based sensor for precise optical power measurement across the near-infrared spectrum. It operates with Agilent/Keysight 81618A or 81619A interface modules integrated into the 8163, 8164, and 8166 multichannel mainframe series. The 5 mm Ge sensor element delivers $\pm 2.2\%$ measurement uncertainty and linearity typically better than ± 0.01 dB, supporting both single-mode and multimode fibers up to 100 μm core diameter with $\text{NA} \leq 0.3$. Technical Specifications Sensor Element: Germanium (Ge), $\varnothing$ 5 mm Wavelength Range: 750 nm to 1800 nm Power Range: +10 dBm to -80 dBm Measurement Uncertainty (1000 nm to 1650 nm): $\pm 2.2\%$ Return Loss: > 50 dB (typically > 55 dB) Linearity

(within 10 dB of range maximum): Typically 50 dB Calibration stability: $\pm 0.3\%$ in second year post-calibration; add 0.01 dB typical for angled connectors

Typical Applications Optical component characterization, fiber-optic system power budgeting, wavelength-dependent attenuation measurement, and multiwavelength source characterization across the 750–1800 nm band.

Compatibility & Integration Requires Agilent/Keysight 81618A (single-channel) or 81619A (dual-channel) interface modules. Compatible with 8163A/B, 8164A/B, and 8166A/B mainframe series. Adapter selection available for popular fiber connector types, bare fibers, and free-space beams. Note: 81623A does not include analog output; the successor 81623B model provides this function.

Features & description

From manufacturer datasheet

Polarization: low PDL designs class

Return Loss: high RL adapter options Cable: sensor cable to mainframe Configuration Note: copy exact wavelength accuracy and power range from 81623A OEM datasheet before denser upload Notes Identity rows from Agilent/Keysight 81623A Optical Power Head listings. Expand full spectral accuracy tables from the OEM optical head datasheet before upload.

81623A Characteristics / Specifications

PARAMETER	VALUE
Instrument Type	Optical power head
Series Family	Agilent 8162x
Model	81623A
Host Instruments	8153 8163 8164 class lightwave meters
Measurement	optical power
Detector	InGaAs or Ge class per exact head
Connector	Agilent versatile interface adapters
Calibration	multi wavelength calibration
Units on Host	dBmWApplication Class: fiber optic power measurement
Form Factor	remote sensor head
Dynamic Range	head dependent wide range
Max Input	damage level on label/datasheet
Linearity	calibrated linear operating region
Uncertainty	per OEM accuracy table and certificate
Temperature	operate within specified window
Zeroing	dark zero on host
Averaging	host averaging settings
Accessories	connector adapters
Documentation	81623A optical head data
Family Peers	81624A 81626A related heads
Polarization	low PDL designs class
Return Loss	high RL adapter options
Cable	sensor cable to mainframe
Configuration Note	copy exact wavelength accuracy and power range from 81623A OEM datasheet before denser upload

81623A Specifications

PARAMETER	VALUE
Agilent Keysight 81623A Optical Power Head	Overview
Interchangeable connector interfaces	Agilent 8162x optical head family
Technical Specifications	Instrument Type: Optical power head

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

Aumictech

788 S 500 E, Pleasant Grove, UT 84062
sales@aumictech.com · +1 (484) 841-9341
<https://aumictechlabs.com>

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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.