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Data Sheet

August 14, 2026

AGILENT / KEYSIGHT

Agilent / Keysight 86120D Multi-Wavelength Meter range: 700-1650 nm

Agilent Keysight 86120D Multi Wavelength Meter The Keysight 86120D multi-wavelength meter measures wavelength and optical power from 700 to 1650 nm (specified) with operating range to 1700 nm. OEM 86120D/86122C data sheets list absolute accuracy plus or minus 1.5 ppm (typical plus or minus 1 ppm within 15 C to 35 C) and 0.6 s measurement cycle time without averaging. Broadband and telecom laser wavelength/power characterization, DWDM multi-line measurements, and automated wavelength adjustment procedures. The Keysight 86120D multi-wavelength meter measures wavelength and optical power from 700 to 1650 nm (specified) with operating range to 1700 nm. OEM 86120D/86122C data sheets list absolute accuracy plus or minus 1.5 ppm (typical plus or minus 1 ppm within 15 C to 35 C) and 0.6 s measurement cycle time without averaging. Broadband and telecom laser wavelength/power characterization, DWDM multi-line measurements, and automated wavelength adjustment procedures. Michelson interferometer with built-in HeNe reference



MODEL

**Agilent / Keysight
86120D**

CALIBRATION

**Available on
request**

CONDITION

Used

STATUS

In stock

RFQ / SKU

86120D

LISTING

<https://aumictechlabs.com/products/86120d-2/>

NIST-traceable cal

SAM registered

30-day returns

NAICS 423690 • 811210 • 541380

This unit

The Keysight 86120D Multi-Wavelength Meter is a precision optical measurement instrument covering 700 nm to 1650 nm, delivering absolute wavelength accuracy of ± 1.5 ppm (typical ± 1

ppm within 15 °C to 35 °C) with measurement cycle times under 0.6 seconds. The meter simultaneously measures individual laser lines and multiple signals across DWDM, component testing, and fiber characterization applications. It resolves spectral features to 15 GHz minimum line separation and handles linewidths to 10 GHz in narrowband mode. Power measurement accuracy reaches ± 0.6 dB with selectable measurement units in nm (vacuum or standard air), cm^{-1} , and THz.

Technical Specifications

Wavelength Range: 700 nm – 1650 nm (specified); 700 nm – 1700 nm (operating)

Absolute Wavelength Accuracy: ± 1.5 ppm typical, ± 1 ppm within 15 °C to 35 °C

Measurement Cycle Time: Less than 0.6 seconds

Maximum Linewidth (Narrowband Mode): 10 GHz

Minimum Resolvable Line Separation: 15 GHz

Power Accuracy: ± 0.6 dB calibration accuracy at ± 30 nm from 780 nm, 1310 nm, and 1550 nm

Power Flatness: ± 0.2 dB (1200 to 1600 nm)

Power Linearity: ± 0.3 dB (1200 to 1600 nm)

Polarization Dependence: ± 0.6 dB (1200 to 1600 nm)

Sensitivity: -25 dBm (800–1200 nm); -40 dBm (1200–1600 nm); -30 dBm (1600–1650 nm); -20 dBm (700–900 nm)

Selectivity: ≥ 100 GHz at 25 dB spacing; ≥ 25 GHz at 10 dB spacing

Broadband Mode: Supported

Key Features

Fast sub-0.6-second measurement cycles enable high-throughput production environments

Supports both narrowband and broadband measurement modes

Selectable output units: nm, cm^{-1} , THz

Operating range extends to 1700 nm

Typical Applications

DWDM system verification and channel power analysis

Optical component testing and characterization

Fiber laser and narrow-linewidth source measurements

Multi-signal analysis across telecom and datacom wavelengths

Compatibility & Integration

Connector options include FC/PC, FC/APC (narrow key), E-2000, SC, LC, MU, ST, and DIN (order separately)

Operating temperature: 0 °C to +55 °C

Humidity rated to 95% maximum

Altitude operation to 2000 meters

Features & description

From manufacturer datasheet

Polarization Dependence 1200 to 1600 nm: plus or minus 0.6 dB

Power Display Resolution: 0.01 dB Sensitivity Single Line 1200 to 1600 nm: -40 dBm Sensitivity Single Line 1600 to 1650 nm: -30 dBm Measurement Cycle Time: 0.6 s Selectivity 100 GHz Spacing: 25 dB characteristic Operating Temperature: 0 C to 55 C Notes From Keysight 86120D and 86122C Multi-Wavelength Meters data sheet columns for 86120D.

86120D Characteristics / Specifications

PARAMETER	VALUE
Model	86120D
Wavelength Range Specified	700 to 1650 nm
Wavelength Range Operating	700 to 1700 nm
Frequency Range Specified	182 to 428 THz
Absolute Wavelength Accuracy	plus or minus 1.5 ppm
Absolute Wavelength Accuracy Typical	plus or minus 1 ppm within 15 C to 35 C
Absolute Accuracy At 1550 nm	plus or minus 2.3 pm
Absolute Accuracy At 1310 nm	plus or minus 2.1 pm
Differential Accuracy	plus or minus 0.4 ppm characteristic
Minimum Resolvable Separation	15 GHz equal power lines characteristic
Minimum Resolvable Separation At 1550 nm	0.12 nm characteristic
Display Resolution Wavelength	0.0001 nm
Wavelength Units	nm vacuum or standard air, cm ⁻¹ , THz
Power Calibration Accuracy	plus or minus 0.6 dB at plus or minus 30 nm from 780 nm 1310 nm and 1550 nm
Power Flatness 1200 to 1600 nm	plus or minus 0.2 dB characteristic
Power Linearity 1200 to 1600 nm	plus or minus 0.3 dB
Polarization Dependence 1200 to 1600 nm	plus or minus 0.6 dB
Power Display Resolution	0.01 dB
Sensitivity Single Line 1200 to 1600 nm	-40 dBm
Sensitivity Single Line 1600 to 1650 nm	-30 dBm
Measurement Cycle Time	0.6 s
Selectivity 100 GHz Spacing	25 dB characteristic
Operating Temperature	0 C to 55 C
Wavelength range	Specified: 700 to 1650 nm

PARAMETER	VALUE
Power linearity	1200 to 1600 nm: plus or minus 0.3 dB

86120D Specifications

PARAMETER	VALUE
Agilent Keysight 86120D Multi Wavelength Meter	Overview
Technical Specifications	Model: 86120D
Notes	From Keysight 86120D and 86122C Multi-Wavelength Meters data sheet columns for 86120D.

General Specifications & Supplementary Characteristics

PARAMETER	VALUE
Operating temperature	0 C to 55 C
Operating Temperature	0 C to 55 C

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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Model	86120D
Wavelength Range Specified	700 to 1650 nm
Wavelength Range Operating	700 to 1700 nm
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Display Resolution Wavelength	0.0001 nm
Wavelength Units	nm vacuum or standard air, cm-1, THz
Power Calibration Accuracy	plus or minus 0.6 dB at plus or minus 30 nm from 780 nm 1310 nm and 1550 nm
Power Flatness 1200 to 1600 nm	plus or minus 0.2 dB characteristic
Power Linearity 1200 to 1600 nm	plus or minus 0.3 dB
Polarization Dependence 1200 to 1600 nm	plus or minus 0.6 dB
Power Display Resolution	0.01 dB
Sensitivity Single Line 1200 to 1600 nm	-40 dBm
Sensitivity Single Line 1600 to 1650 nm	-30 dBm
Measurement Cycle Time	0.6 s
Selectivity 100 GHz Spacing	25 dB characteristic
Operating Temperature	0 C to 55 C
Notes	
From Keysight 86120D and 86122C Multi-Wavelength Meters data sheet columns for 86120D.	

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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NIST-traceable calibration · SAM registered ·
30-day returns
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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.