

**Aumictech**

Test & measurement · bought, sold, repaired, calibrated

Data Sheet

August 14, 2026

AGILENT / KEYSIGHT

Agilent / Keysight 86122C Multi-Wavelength Meter range of 1270 to 1650 nm

Selectivity 90 GHz Spacing: 25 dB characteristic Option 100 Measurement Cycle: 0.5 s class
Option 110 Measurement Cycle: 0.3 s class Assumed Linewidth Class: less than 2.5 GHz for
86122C class Option 100 Measurement Cycle: 0.5 s class Option 110 Measurement Cycle: 0.3 s
class Assumed Linewidth Class: less than 2.5 GHz for 86122C class Recommended
Recalibration Period: 2 years class family sheet



MODEL

**Agilent / Keysight
86122C**

CALIBRATION

**Available on
request**

CONDITION

Used

STATUS

In stock

RFQ / SKU

86122C

LISTING

[https://aumictechlabs.c
om/products/86122c-2/](https://aumictechlabs.com/products/86122c-2/)

NIST-traceable cal

SAM registered

30-day returns

NAICS 423690 · 811210 · 541380

This unit

The Keysight 86122C Multi-Wavelength Meter delivers precision measurement of optical wavelengths, power, and Optical Signal-to-Noise Ratio (OSNR) across the 1270 nm to 1650 nm band. Purpose-built for DWDM and CWDM system characterization, it enables development, manufacturing, and verification workflows for tunable transmitter lasers and optical subsystems in high-speed communication networks. Technical Specifications Wavelength range: 1270 nm to 1650 nm Absolute wavelength accuracy: ± 0.2 ppm Differential wavelength accuracy: ± 0.15 ppm Power accuracy: ± 0.5 dB Measurement cycle time: 0.3 seconds (with fast update option 86122C-110) Minimum resolvable line separation: 5 GHz Maximum linewidth (narrowband mode): 2.5 GHz Simultaneous laser line measurement capacity: up to 1,000 lines Safe input power level: +18 dBm

Supported high input power level: +10 dBm

Key Features

- Built-in HeNe reference laser ensures real-time absolute wavelength measurement traceable to NIST
- Narrowband and broadband measurement modes - broadband mode measures weighted center of wider spectral lines
- Standalone test capability with built-in applications for OSNR, wavelength drift, and power drift monitoring
- Windows-based software control
- Autoranging AC line input with three-prong power cord required for earth grounding

Typical Applications

- DWDM and CWDM system testing and validation
- Tunable laser transmitter development and manufacturing
- Optical subsystem characterization for high-speed communications
- Production verification of wavelength and power performance

Compatibility & Integration

Designed for indoor use. Safety Class 1 product compliant with IEC 60825-1 (2014) and 21 CFR 1040.10 laser regulations. Requires adequate ventilation; forced convection mandatory if cabinet power dissipation exceeds 800 watts. No operator serviceable components - qualified personnel required for service.

Features & description

From manufacturer datasheet

Built-in HeNe reference laser

Simultaneous multi-line wavelength and power Option 100 and Option 110 update-rate choices Single-scan accuracy without averaging Technical Specifications Model: 86122C Wavelength Range: 1270 to 1650 nm Absolute Wavelength Accuracy: plus or minus 0.2 ppm within 15 C to 35 C Absolute Accuracy At 1550 nm: plus or minus 0.3 pm Absolute Accuracy At 1310 nm: plus or minus 0.3 pm Differential Accuracy: plus or minus 0.15 ppm characteristic Minimum Resolvable Separation: 5 GHz equal power lines characteristic Minimum Resolvable Separation At 1550 nm: 0.04 nm characteristic Minimum Resolvable Separation At 1310 nm: 0.03 nm characteristic Display Resolution Wavelength: 0.0001 nm Wavelength Units: nm vacuum or standard air, cm-1, THz Power Calibration Accuracy: plus or minus 0.5 dB at plus or minus 30 nm from 1310 nm and 1550 nm Power Flatness 1270 to 1600 nm: plus or minus 0.2 dB characteristic Power Linearity 1270 to 1600 nm: plus or minus 0.3 dB for lines above -30 dBm

Polarization Dependence 1270 to 1600 nm: plus or minus 0.6 dB

Power Display Resolution: 0.01 dB Sensitivity Single Line 1270 to 1600 nm: -32 dBm Sensitivity Single Line 1600 to 1650 nm: -22 dBm Selectivity 90 GHz Spacing: 25 dB characteristic Option 100 Measurement Cycle: 0.5 s class Option 110 Measurement Cycle: 0.3 s class Update Rate Option 110: 3 per second Assumed Linewidth Class: less than 2.5 GHz for 86122C class Recommended Recalibration Period: 2 years class family sheet Notes From Keysight 86120D and 86122C Multi-Wavelength Meters data sheet columns for 86122C including Option 100/110 update rates.

86122C Characteristics / Specifications

PARAMETER	VALUE
Model	86122C
Wavelength Range	1270 to 1650 nm
Absolute Wavelength Accuracy	plus or minus 0.2 ppm within 15 C to 35 C
Absolute Accuracy At 1550 nm	plus or minus 0.3 pm
Absolute Accuracy At 1310 nm	plus or minus 0.3 pm
Differential Accuracy	plus or minus 0.15 ppm characteristic
Minimum Resolvable Separation	5 GHz equal power lines characteristic
Minimum Resolvable Separation At 1550 nm	0.04 nm characteristic
Minimum Resolvable Separation At 1310 nm	0.03 nm characteristic
Display Resolution Wavelength	0.0001 nm
Wavelength Units	nm vacuum or standard air, cm-1, THz
Power Calibration Accuracy	plus or minus 0.5 dB at plus or minus 30 nm from 1310 nm and 1550 nm
Power Flatness 1270 to 1600 nm	plus or minus 0.2 dB characteristic
Power Linearity 1270 to 1600 nm	plus or minus 0.3 dB for lines above -30 dBm
Polarization Dependence 1270 to 1600 nm	plus or minus 0.6 dB
Power Display Resolution	0.01 dB
Sensitivity Single Line 1270 to 1600 nm	-32 dBm
Sensitivity Single Line 1600 to 1650 nm	-22 dBm
Selectivity 90 GHz Spacing	25 dB characteristic
Update Rate Option 1	3 per second
Assumed Linewidth Class	less than 2.5 GHz for 86122C class
Recommended Recalibration Period	2 years class family sheet
Linewidth	Class: less than 2.5 GHz for 86122C class

PARAMETER	VALUE
Power linearity	1270 to 1600 nm: plus or minus 0.3 dB for lines above -30 dBm

86122C Specifications

PARAMETER	VALUE
Agilent Keysight 86122C Multi Wavelength Meter	Overview
Key Features	Plus or minus 0.2 ppm absolute wavelength accuracy
Technical Specifications	Model: 86122C
Notes	From Keysight 86120D and 86122C Multi-Wavelength Meters data sheet columns for 86122C including Option 100/110 update rates.

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
Model	86122C
Wavelength Range	1270 to 1650 nm
Absolute Wavelength Accuracy	plus or minus 0.2 ppm within 15 C to 35 C
Absolute Accuracy At 1550 nm	plus or minus 0.3 pm
Absolute Accuracy At 1310 nm	plus or minus 0.3 pm
Differential Accuracy	plus or minus 0.15 ppm characteristic
Minimum Resolvable Separation	5 GHz equal power lines characteristic
Minimum Resolvable Separation At 1550 nm	0.04 nm characteristic
Minimum Resolvable Separation At 1310 nm	0.03 nm characteristic
Display Resolution Wavelength	0.0001 nm
Wavelength Units	nm vacuum or standard air, cm-1, THz
Power Calibration Accuracy	plus or minus 0.5 dB at plus or minus 30 nm from 1310 nm and 1550 nm
Power Flatness 1270 to 1600 nm	plus or minus 0.2 dB characteristic
Power Linearity 1270 to 1600 nm	plus or minus 0.3 dB for lines above -30 dBm
Polarization Dependence 1270 to 1600 nm	plus or minus 0.6 dB
Power Display Resolution	0.01 dB
Sensitivity Single Line 1270 to 1600 nm	-32 dBm
Sensitivity Single Line 1600 to 1650 nm	-22 dBm
Selectivity 90 GHz Spacing	25 dB characteristic
Option 100 Measurement Cycle: 0.5 s class	
Option 110 Measurement Cycle: 0.3 s class	
Specifications	
PARAMETER	VALUE
Update Rate Option 110	3 per second
Assumed Linewidth Class	less than 2.5 GHz for 86122C class
Recommended Recalibration Period	2 years class family sheet

Notes

From Keysight 86120D and 86122C Multi-Wavelength Meters data sheet columns for 86122C including Option 100/110 update rates.

Ordering Information

OPTION	DESCRIPTION
Option 110	fast update reducing cycle time to 0.3 s.
Option 100	and Option 110 update-rate choices

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.