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Data Sheet

August 15, 2026

AGILENT / KEYSIGHT

Agilent/Keysight 86102U

The Agilent 86102U is a dual optical/electrical plug-in for 86100 Infiniium DCA mainframes. OEM 86100B module tables list 86102U optical unfiltered bandwidth 15 GHz, wavelength 750 to 860 nm, calibrated wavelength 850 nm, optical sensitivity -7.5 dBm, unfiltered transition time 32 ps, characteristic RMS noise 14 uW (maximum 20 uW), and 62.5/125 um fiber. The electrical channel is 20 GHz. Average power monitor range is -27 dBm to +3 dBm. Maximum non-destruct average optical power is 2 mW (+3 dBm). Short-wavelength 850 nm transceiver waveform and reference-receiver compliance on 86100 DCA. Literature: Agilent 86100B wide-bandwidth oscilloscope module table 86102U Documentation Type: OEM 86100 module specifications Brand Lineage: HP Agilent Keysight Infiniium DCA System Role: short-wavelength optical receiver plus electrical channel



MODEL

**Agilent / Keysight
86102U**

CALIBRATION

**Available on
request**

CONDITION

Used

STATUS

In stock

RFQ / SKU

86102U

LISTING

<https://aumictechlabs.com/products/86102u-2/>

NIST-traceable cal

SAM registered

30-day returns

NAICS 423690 • 811210 • 541380

This unit

The Keysight 86102U is a plug-in module for the 86100 series Infiniium DCA oscilloscope platform, delivering dual-channel measurement capability for high-speed electrical and optical signal analysis. The module combines a 20 GHz electrical channel with a 15 GHz amplified optical channel, enabling comprehensive characterization of digital and optoelectronic components in signal integrity and compliance testing workflows. Technical Specifications Electrical Channel Bandwidth: 20 GHz Input connector: 3.5 mm male Maximum input signal: ± 2 Vdc Characteristic

RMS noise: 0.25 mV (12.4 GHz BW); 0.5 mV (20 GHz BW) Optical Channel Bandwidth: 15 GHz
Channel type: Amplified optical Fiber compatibility: 62.5/125 fibers Wavelength range: 750–860 nm
Characteristic RMS noise: 14 μ W (15 GHz BW) Reference receiver rates: 1.250/2.488 Gb/s, 2.488/3.125 Gb/s, 3.125/10.3125 Gb/s Compliance Testing Built-in transmitter compliance filters for 1250/2488 Mb/s and 2488/3125 Mb/s data rates
Key Features Low-noise amplified optical receiver supporting multirate operation across standard digital transmission speeds Dual electrical and optical measurement paths in a single module Fiber interface for 62.5/125 multimode systems Integrated compliance filtering for common Ethernet and digital rates
Typical Applications Signal integrity analysis on high-speed digital interconnects Transmitter compliance characterization Optical receiver and transceiver testing Optoelectronic component evaluation
Compatibility & Integration The 86102U integrates with Agilent/Keysight 86100A/B/C/D Infiniium DCA, DCA-J, and DCA-X series mainframes. The 86100D DCA-X platform offers 100% backward compatibility with legacy DCA modules, preserving investment in existing test infrastructure. Note: This product is obsolete.

86102U Characteristics / Specifications

PARAMETER	VALUE
Model	86102U
Instrument Type	Optical/electrical DCA plug-in
Host Mainframe	86100A, 86100B, 86100C, 86100D Infiniium DCA
Wavelength Range	750 to 860 nm
Calibrated Wavelength	850 nm
Optical Sensitivity	-7.5 dBm
Transition Time Unfiltered	32 ps (10 percent to 90 percent, TR = 0.48/BW optical)
Rms Noise Characteristic	14 uW
Rms Noise Maximum	20 uW
Fiber Input	62.5/125 um, user selectable connector
Average Power Monitor	-27 dBm to +3 dBm
Maximum Nondestruct Average	2 mW (+3 dBm)
Maximum Nondestruct Peak	10 mW (+10 dBm)
Electrical Bandwidth	20 GHz
Electrical Connector	3.5 mm male
Maximum Electrical Input	plus/minus 2 Vdc
Electrical Rms Noise	0.25 mV at 12.4 GHz bandwidth; 0.5 mV at 20 GHz bandwidth characteristic
Related Modules	86101A 2.85 GHz and 86102A 10 GHz short-wavelength family
Manufacturer	HP Agilent Keysight
Literature	Agilent 86100B wide-bandwidth oscilloscope module table 86102U
Form Factor	86100 DCA plug-in
Documentation Type	OEM 86100 module specifications
Brand Lineage	HP Agilent Keysight Infiniium DCA
System Role	short-wavelength optical receiver plus electrical channel

PARAMETER	VALUE
Bandwidth	15 GHz unfiltered

86102U Specifications

PARAMETER	VALUE
Applications	Short-wavelength 850 nm transceiver waveform and reference-receiver compliance on 86100 DCA.
Key Features	15 GHz optical, 20 GHz electrical
Technical Specifications	Model: 86102U

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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Documentation Type	OEM 86100 module specifications
Brand Lineage	HP Agilent Keysight Infiniium DCA
System Role	short-wavelength optical receiver plus electrical channel

Notes

From Agilent 86100B module specification tables for 86102U (15 GHz optical / 20 GHz electrical, 750-860 nm, -7.5 dBm, noise, fiber). Filtered reference-receiver rates and connector options (201/202/203) are on the 86102U option rows of the same table.

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.