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Data Sheet

August 15, 2026

AGILENT / KEYSIGHT

Agilent / Keysight N1030B Dual Optical Channel Module

Keysight N1030B Dual Optical Channel 65 GHz DCA Module The Keysight N1030B is a dual-channel optical mini-module for N1000A and 86100D DCA-X mainframes. OEM FlexDCA N1030A/B specifications list two optical channels, 65 GHz characteristic optical bandwidth, 1250 to 1600 nm, factory calibration at 1310 nm and 1550 nm, 9/125 μ m FC fiber input, and 16-bit channel ADC. 53 GBd and 112 GBd class optical transmitter TDECQ, 25/28 GBd NRZ reference-receiver work, and dual-channel parallel optical characterization. The Keysight N1030B is a dual-channel optical mini-module for N1000A and 86100D DCA-X mainframes. OEM FlexDCA N1030A/B specifications list two optical channels, 65 GHz characteristic optical bandwidth, 1250 to 1600 nm, factory calibration at 1310 nm and 1550 nm, 9/125 μ m FC fiber input, and 16-bit channel ADC. 53 GBd and 112 GBd class optical transmitter TDECQ, 25/28 GBd NRZ reference-receiver work, and dual-channel parallel optical characterization. Two independent 65 GHz optical channels in one slot



MODEL

**Agilent / Keysight
N1030B**

CALIBRATION

**Available on
request**

CONDITION

Used

STATUS

In stock

RFQ / SKU

N1030B

LISTING

<https://aumictechlabs.com/products/n1030b-2/>

NIST-traceable cal

SAM registered

30-day returns

NAICS 423690 · 811210 · 541380

This unit

The Keysight N1030B is a dual-channel optical module that delivers 65 GHz bandwidth for simultaneous characterization of two independent optical signals, transceivers, and components.

Built on equivalent-time sampling architecture, it achieves intrinsic jitter as low as 90 fs rms and supports analysis of high-speed optical signals exceeding 53 GBd and 112 GBd (224 Gbps) TDECQ performance. The module accommodates filter bandwidths from 15.6 GBd to 120 GBd across the 1250 nm to 1600 nm wavelength range, making it well-suited for R&D, manufacturing, and field validation of optical communications systems.

Technical Specifications

Optical bandwidth: 65 GHz per channel
Channels: 2 independent optical
Intrinsic jitter: 90 fs rms
Supported filter range: 15.6 GBd to 120 GBd
Signal analysis capability: >53 GBd and 112 GBd (224 Gbps)
TDECQ
Wavelength range: 1250 nm to 1600 nm
Sampling rate (N1000A mainframe): Up to 250 kSa/s
Sampling rate (86100D mainframe): Up to 40 kSa/s
Sampling method: Equivalent-time
Impulse response correction: Enabled on all optical channels
Input connector: FC/PC optical

Key Features

Dual independent 65 GHz optical channels enable parallel signal acquisition
Low intrinsic jitter (90 fs rms) supports precision characterization of complex modulation schemes
Extended wavelength coverage from 1250 nm to 1600 nm spans C-band and L-band applications
Impulse response correction optimizes signal fidelity across all optical channels
Flexible filter bandwidth selection accommodates diverse baud-rate requirements

Typical Applications

Optical transceiver characterization and compliance testing
High-speed optical signal analysis in communications systems
Optical component transmission and reflection characterization
Manufacturing validation of optical transmitters and transceivers
Research and development of advanced optical systems

Compatibility & Integration

Compatible with N1000A DCA-X mainframe (up to 250 kSa/s sampling)
Compatible with 86100D DCA-X mainframe (up to 40 kSa/s sampling)
Operates with Keysight N1010A FlexDCA software

N1030B Characteristics / Specifications

PARAMETER	VALUE
Model	N1030B
Instrument Type	Dual optical DCA mini module
Optical Channel Count	2
Nominal Wavelength Range	1250 nm to 1600 nm
Factory Calibrated Wavelengths	1310 nm plus or minus 20 nm and 1550 nm plus or minus 20 nm
User Calibration Wavelength Range	1250 nm to 1600 nm
Fiber Input	9/125 μ m
Fiber Connector	FC
Channel Adc	16 bits
Scale Factor Minimum	5 μ W per division
Scale Factor Maximum	500 μ W per division
Cw Offset Range	plus 1.0 mW to minus 3 mW
Maximum Measurable Input Power	4 mW at 500 μ W/div
Average Power Monitor Range	minus 30 dBm to plus 6 dBm at 1310 nm and 1550 nm
Average Power Monitor Accuracy 1 μ W To 2 mW	200 nW plus 5 percent of reading plus connector uncertainty
Maximum Nondestruct Peak Power	5 mW plus 7 dBm
Rms Noise Characteristic 25GbE 1310 nm	16 μ W
Rms Noise Characteristic 25GbE 1550 nm	18 μ W
Rms Noise Maximum Unfiltered 65 GHz 1310 nm	105 μ W
Rms Noise Maximum Unfiltered 65 GHz 1550 nm	110 μ W
Optical Sensitivity Characteristic 25GbE 1310 nm	minus 6.5 dBm
Specified Temperature	plus 10 C to plus 40 C after 1 hour

PARAMETER	VALUE
Mainframe N1000A Sample Rate Characteristic	250 kSa/s
Mainframe 86100D Sample Rate Characteristic	40 kSa/s
Calibration Cycle	12 months
Wavelength range	1250 nm to 1600 nm
Bandwidth	Characteristic: 65 GHz at minus 3 dBo

N1030B Specifications

PARAMETER	VALUE
Keysight N1030B Dual Optical Channel 65 GHz DCA Module	Overview
Key Features	Two independent 65 GHz optical channels in one slot
Impulse response correction option IRC	Hardware filters for 25 to 28 GBd and 53 to 56 GBd PAM4
Works in N1000A at 250 kSa/s or 86100D at 40 kSa/s	Average power monitor minus 30 dBm to plus 6 dBm
Technical Specifications	Model: N1030B
Notes	From Keysight FlexDCA N1030A/B Module Specifications. Filter and IRC option mix is unit-specific on the module option list.

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 list two optical channels, 65 GHz characteristic optical bandwidth, 1250 to 1600 nm, factory calibration at 1310 nm and 1550 nm, 9/125 um FC fiber input, and 16-bit channel ADC.

Applications

53 GBd and 112 GBd class optical transmitter TDECQ, 25/28 GBd NRZ reference-receiver work, and dual-channel parallel optical characterization.

Key Features

Two independent 65 GHz optical channels in one slot

Impulse response correction option IRC

Hardware filters for 25 to 28 GBd and 53 to 56 GBd PAM4

Works in N1000A at 250 kSa/s or 86100D at 40 kSa/s

Average power monitor minus 30 dBm to plus 6 dBm

Technical Specifications

Technical Specifications

PARAMETER	VALUE
Model	N1030B
Instrument Type	Dual optical DCA mini module
Optical Channel Count	2
Optical Bandwidth Characteristic	65 GHz at minus 3 dBo
Nominal Wavelength Range	1250 nm to 1600 nm
Factory Calibrated Wavelengths	1310 nm plus or minus 20 nm and 1550 nm plus or minus 20 nm
User Calibration Wavelength Range	1250 nm to 1600 nm
Fiber Input	9/125 um
Fiber Connector	FC
Channel Adc	16 bits
Scale Factor Minimum	5 uW per division
Scale Factor Maximum	500 uW per division
Cw Offset Range	plus 1.0 mW to minus 3 mW
Maximum Measurable Input Power	4 mW at 500 uW/div
Average Power Monitor Range	minus 30 dBm to plus 6 dBm at 1310 nm and 1550 nm

Average Power Monitor Accuracy 1 uW To 2 mW: 200 nW plus 5 percent of reading plus connector uncertainty

Specifications

PARAMETER	VALUE
Maximum Nondestruct Peak Power	5 mW plus 7 dBm

PARAMETER	VALUE
Rms Noise Characteristic 25GbE 1310 nm	16 uW
Rms Noise Characteristic 25GbE 1550 nm	18 uW

Rms Noise Maximum Unfiltered 65 GHz 1310 nm: 105 uW
Rms Noise Maximum Unfiltered 65 GHz 1550 nm: 110 uW

Specifications

PARAMETER	VALUE
Optical Sensitivity Characteristic 25GbE 1310 nm	minus 6.5 dBm
Specified Temperature	plus 10 C to plus 40 C after 1 hour
Mainframe N1000A Sample Rate Characteristic	250 kSa/s
Mainframe 86100D Sample Rate Characteristic	40 kSa/s
Calibration Cycle	12 months

Notes
From Keysight FlexDCA N1030A/B Module Specifications. Filter and IRC option mix is unit-specific on the module option list.

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 ·
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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.