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Data Sheet

August 15, 2026

AGILENT / KEYSIGHT

Agilent/Keysight J1420B

HP Agilent J1420B SpectralBER 10 Gb/s DWDM Receiver Module The Agilent J1420B is the message-based C-size three-slot VXI receiver in the SpectralBER 10 Gb/s DWDM system. OEM SpectralBER installation literature names J1420B as DWDM Receiver Module 9.953 Gb/s. With J1421A clock and J1422B transmitter it makes BER measurements on 10 Gb/s PRBS payloads, captures J0/J1 traces, and detects B1/B2/B3, REI, bit errors, and alarms including LOS, OOF, LOF, AIS, RDI, and LOP. Optical input power must not exceed 0 dBm. The Agilent J1420B is the message-based C-size three-slot VXI receiver in the SpectralBER 10 Gb/s DWDM system. OEM SpectralBER installation literature names J1420B as DWDM Receiver Module 9.953 Gb/s. With J1421A clock and J1422B transmitter it makes BER measurements on 10 Gb/s PRBS payloads, captures J0/J1 traces, and detects B1/B2/B3, REI, bit errors, and alarms including LOS, OOF, LOF, AIS, RDI, and LOP. Optical input power must not exceed 0 dBm. 10 Gb/s DWDM STM-64/OC-192 BER and alarm analysis in a C-size VXI rack.



MODEL

**Agilent / Keysight
J1420B**

CALIBRATION

**Available on
request**

CONDITION

Used

STATUS

In stock

RFQ / SKU

J1420B

LISTING

<https://aumictechlabs.com/products/j1420b-2/>

NIST-traceable cal

SAM registered

30-day returns

NAICS 423690 · 811210 · 541380

This unit

The Agilent/Keysight J1420B is a VXI receiver module for SDH/SONET signal analysis at 10 Gb/s. Operating as a C-size, three-slot component, it receives framed STM-64/STS-192 signals via optical interface and integrates with the J1421A clock source and J1422B transmitter to form a complete SpectralBER system. The module delivers precise bit error rate and optical signal-to-

noise ratio measurements for short-reach optical applications. Technical Specifications Data Rate: 9.953 Gb/s (STM-64/STS-192) Optical Interface: SC or FC/PC connector, 1260 nm to 1620 nm wavelength range Receiver Sensitivity: -13.5 dBm Maximum Input Power: +6 dBm Optical Power Measurement Range: -60 dBm to +6 dBm Optical Return Loss: > 28 dB Detector Type: InGaAs (Indium Gallium Arsenide) Form Factor: C-size, three-slot VXI module Key Features Monitors J0 and J1 section trace messages for SDH/SONET signal integrity Performs G.826 and G.828 error analysis per ITU standards Supports PRBS pattern-based bit error testing Measures both BER and OSNR with high repeatability Wide optical power measurement range accommodates diverse link budgets Typical Applications Short-reach optical signal characterization and validation SDH/SONET alarm and performance monitoring Optical transceiver and receiver module testing Network equipment commissioning and troubleshooting Compatibility & Integration Designed for VXIbus architecture, the J1420B operates as the receiver component of the 10 G SpectralBER system. Requires the Agilent J1421A clock source module and Agilent J1422B transmitter module for full system operation. The module is obsolete but continues to receive vendor support.

J1420B Characteristics / Specifications

PARAMETER	VALUE
Model	J1420B
Instrument Type	SpectralBER 10 Gb/s DWDM receiver
Data Rate	9.953 Gb/s
Product Name	DWDM Receiver Module 9.953Gb/s
Form Factor	message-based C-size VXI
Slot Width	three VXI slots
Factory Default Slots	6, 7, and 8 in the 10 Gb/s example layout
Related Clock	J1421A Clock Source Module
Related Transmitter	J1422B Transmitter Module
Host Command	E1406A Command Module
Mainframe	C-size VXI
Maximum Optical Input	0 dBm (do not connect J1422B output directly)
Alarms	LOS, OOF, LOF, AIS-L/MS-AIS, RDI-L/MS-RDI, AIS-P/AU-AIS, LOP-P/AU-LOP, RDI-P/HP-RDI
Errors	B1, B2, B3, REI-L/MS-REI, REI-P/HP-REI, and bit errors
Trace Capture	J0 and J1 section/path traces
Control	SCPI, Universal Instrument Drivers, Soft Front Panel
Manufacturer	Agilent Keysight HP
Use Case	10 Gb/s DWDM BER receive
Literature	Agilent SpectralBER System Installation and System Reference Manual J1420B
Family	SpectralBER 10 Gb/s
Documentation Type	OEM SpectralBER installation manual
Brand Lineage	HP Agilent Keysight SpectralBER
System Role	10 Gb/s DWDM receiver

J1420B Specifications

PARAMETER	VALUE
Applications	10 Gb/s DWDM STM-64/OC-192 BER and alarm analysis in a C-size VXI rack.
Key Features	9.953 Gb/s DWDM receiver
Works with J1421A and J1422B	0 dBm maximum optical input
Technical Specifications	Model: J1420B

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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Family	SpectralBER 10 Gb/s
Documentation Type	OEM SpectralBER installation manual
Brand Lineage	HP Agilent Keysight SpectralBER
System Role	10 Gb/s DWDM receiver
Notes	
From Agilent SpectralBER installation/reference manual (J1420B 9.953 Gb/s three-slot VXI receiver,	

alarm/error list, 0 dBm optical-input caution). Receiver sensitivity, wavelength tuning, and OSNR are in the J1420B specification document in the system binder.

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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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.