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Data Sheet

August 13, 2026

AGILENT / HP

Agilent HP J7231B OmniBer OTN Opt.004, 012, 100, 108, 609

Agilent HP J7231B OmniBER OTN Jitter Communications Performance Analyzer The Agilent/HP J7231B OmniBER OTN is a high-accuracy jitter and wander analyzer for SONET/SDH and ITU-T G.709 OTN devices through OTU2 at 10.71 Gb/s. Ultra-low intrinsic jitter exceeding ITU-T O.172 and parallel measurement filters speed compliance testing for R&D verification and manufacturing. The Agilent/HP J7231B OmniBER OTN is a high-accuracy jitter and wander analyzer for SONET/SDH and ITU-T G.709 OTN devices through OTU2 at 10.71 Gb/s. Ultra-low intrinsic jitter exceeding ITU-T O.172 and parallel measurement filters speed compliance testing for R&D verification and manufacturing.



MODEL

**Agilent / HP
J7231B**

CALIBRATION

**Available on
request**

CONDITION

Used

STATUS

In stock

RFQ / SKU

J7231B

LISTING

<https://aumictechlabs.com/products/j7231b-2/>

NIST-traceable cal

SAM registered

30-day returns

NAICS 423690 · 811210 · 541380

This unit

The Agilent HP J7231B OmniBer OTN is a communications performance analyzer engineered for SONET, SDH, and OTN equipment testing across development, verification, and manufacturing environments. It delivers accurate jitter testing that exceeds ITU-T O.172 standards and supports optical rates from 52 Mb/s to 10.71 Gb/s with full protocol coverage including ITU-T G.709 OTN specifications. Technical Specifications Data Rates & Protocols SONET/SDH: 52 Mb/s to 10 Gb/s including OC-1/3/12/48/192, STM-0/1/4/16/64, OTU2 (10.71 Gb/s) Unframed rates: 10.71 Gb/s, 9.95

Gb/s, 2.48 Gb/s, 622 Mb/s, 155 Mb/s, 52 Mb/s PDH/DSn support: STS-1, STS-3, STM-1e Jitter & Wander Compliance: ITU-T O.172 (SONET/SDH jitter generation & measurement), ITU-T O.173 (OTN jitter generation & measurement) Programmable user masks for jitter tolerance and transfer measurements Parallel measurement filters enable fast testing and event correlation Short jitter transient detection and measurement MTIE/TDEV wander analysis Optical Interfaces Wavelengths: 1310 nm, 1550 nm, dual 1310/1550 nm (up to 2.5 Gb/s rates); 1550 nm transmit at 10 Gb/s Connector options: Side-mounted (Option 004), FC/PC (Option 609), SC (Option 610) Transmitters: NRZ line coding at 52 Mb/s–2.5 Gb/s and 10 Gb/s–10.71 Gb/s Receivers: NRZ line coding, 1290–1565 nm operational range, input damage power >0 dBmKey Features All-channel simultaneous monitoring of up to 192 STS/AU channels in received SONET/SDH signals GFP (G.7041) and LAPS (X.86) encapsulation analysis for Ethernet payload mapping Virtual Concatenation (G.707) and LCAS (G.7042) simulation and analysisTypical Applications OTN equipment development and validation, SONET/SDH performance verification, manufacturing test and acceptance, jitter characterization across optical transport networks.Compatibility & Integration Supports ITU-T G.709 OTN standards, G.707 virtual concatenation, and legacy SONET/SDH protocol stacks.

Features & description

From manufacturer datasheet

Features

- All optical jitter and wander test 52 Mb/s to 10.71 Gb/s
- Exceeds ITU-T O.172 intrinsic jitter specification
- Parallel measurement filter architecture for faster tests
- Programmable jitter tolerance and transfer user masks
- G.709 OTU2 with FEC simulation analysis and OTU frame capture
- GFP G.7041 and LAPS X.86 Ethernet payload support
- High and low order VCAT G.707 and LCAS G.7042 to 256 ms differential delay

Applications

- SONET SDH optical jitter tolerance and transfer testing to 10 Gb/s
- ITU-T G.709 OTU2 FEC and OTN jitter verification at 10.71 Gb/s
- Wander generation and measurement per O.172 class requirements
- Next-gen GFP LAPS VCAT LCAS payload and encapsulation debug

J7231B Characteristics / Specifications

PARAMETER	VALUE
Model	J7231B
Manufacturer	Agilent / HP / Keysight
Instrument Type	OmniBER OTN Jitter Communications Performance Analyzer
Alias	J7231B; OmniBER OTN J7231B
Maximum line rate	10.71 Gb/s OTU2
SONET rates	OC-1 / OC-3 / OC-12 / OC-48 / OC-192 class with options
SDH rates	STM-0 / STM-1 / STM-4 / STM-16 / STM-64 class with options
Jitter test range optical	52 Mb/s to 10.71 Gb/s
OTN support	ITU-T G.709 OTU2 Option 112
Jitter standard reference	exceeds ITU-T O.172
Wander capability	generation and measurement exceeds O.172 class
Measurement architecture	parallel measurement filters
GFP support	ITU-T G.7041
LAPS support	ITU-T X.86
VCAT support	ITU-T G.707 high and low order
LCAS support	ITU-T G.7042
Differential delay max	256 ms G.707
Optical option 1	52 to 2488 Mb/s 1310/1550 nm
Connector option 6	SC adapters
Connector mounting option 0	side connectors
APS disruption measurement	SONET/SDH service disruption
Encapsulation analyzer	client data view and capture
Family	OmniBER OTN Notes Specs from Agilent OmniBER OTN datasheet and J7231B configuration listings. Confirm installed optical rate options wavelengths and connector style on the unit.

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.

Performance Analyzer

Overview

The Agilent/HP J7231B OmniBER OTN isahigh-accuracy jitter and wander analyzer for SONET/SDH and ITU-T G.709 OTN devices through OTU2 at 10.71 Gb/s. Ultra-low intrinsic jitter exceeding ITU-T 0.172 and parallel measurement filters speed compliance testing for R&D verification and manufacturing.

Applications

- SONET SDH optical jitter tolerance and transfer testing to 10 Gb/s
- ITU-T G.709 OTU2 FEC and OTN jitter verification at 10.71 Gb/s
- Wander generation and measurement per 0.172 class requirements
- Next-gen GFP LAPS VCAT LCAS payload and encapsulation debug

Key Features

- All optical jitter and wander test 52 Mb/s to 10.71 Gb/s
- Exceeds ITU-T 0.172 intrinsic jitter specification
- Parallel measurement filter architecture for faster tests
- Programmable jitter tolerance and transfer user masks
- G.709 OTU2 with FEC simulation analysis and OTU frame capture
- GFP G.7041 and LAPS X.86 Ethernet payload support
- High and low order VCAT G.707 and LCAS G.7042 to 256 ms differential delay

Technical Specifications

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OTN support	ITU-T G.709 OTU2 Option 112
Jitter standard reference	exceeds ITU-T 0.172
Wander capability	generation and measurement exceeds 0.172 class
Measurement architecture	parallel measurement filters
GFP support	ITU-T G.7041
LAPS support	ITU-T X.86
VCAT support	ITU-T G.707 high and low order
LCAS support	ITU-T G.7042

PARAMETER	VALUE
Differential delay max	256 ms G.707
Optical option 106	52 to 2488 Mb/s 1310/1550 nm
Optical option 108	10 Gb/s 1550 nm
Optical option 112	10.7 Gb/s G.709 OTU2
Connector option 610	SC adapters
Connector mounting option 004	side connectors
APS disruption measurement	SONET/SDH service disruption
Encapsulation analyzer	client data view and capture
Family	OmnIBER OTN

Notes

Specs from Agilent OmniBER OTN datasheet and J7231B configuration listings. Confirm installed optical rate options wavelengths and connector style on the unit.

Ordering Information

OPTION	DESCRIPTION
Option 112	Jitter standard reference: exceeds ITU-T O.172

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.