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Data Sheet
August 13, 2026

EXFO

EXFO pB100A4 Pattern Generator

The EXFO pB100A4 (pocketBERT) isacompact quad-channel bit-error-rate tester / pattern generator for CFP2, CFP4, QSFP24, and QSFP28 transceiver R&D and production. It supports pattern generation and checking at 9.93–11.8 Gbit/s and/or 24–30 Gbit/s with PRBS and specialized patterns, K-connector I/O cables, Windows GUI, and API automation. Instrument Type: Quad Channel BERT / Pattern Generator Alias: pB100A4; PB100A4 Pattern Generator Tx data rate option 10: 9.93 to 11.8 Gbit/s Combined option: 9.93 to 11.8 and 24 to 30 Gbit/s

MODEL **Exfo pB100A4**	CALIBRATION **Available on request**
CONDITION **Used**	STATUS **In stock**
RFQ / SKU **pB100A4**	LISTING **https://aumictechlabs.com/products/pb100a4-2/**

NIST-traceable cal · SAM registered · 30-day returns

NAICS 423690 · 811210 · 541380

This unit

The EXFO pB100A4 Pattern Generator is a instrument for generating precise, customizable digital patterns essential to testing and validating high-speed digital communication systems. This pattern generator characterizes signal quality, jitter, and timing in modern network infrastructures across laboratory and manufacturing environments.Technical Specifications Data rate support: up to 12.5 Gbps Bit-error-rate capability: up to 10^{-2} Clock and data recovery: four independent CDR channels Electrical interface: 4×10G Monitoring: Rx eye diagram capabilityKey Features Pattern generation includes PRBS sequences (2^{31}-1, 2^{23}-1, 2^{15}-1, 2^{9}-1, 2^{7}-1), square waves, and SSPR patterns conforming to OIF-CEI-03.0. Four independent CDR channels enable flexible signal recovery across multiple test channels. Rx eye diagram monitoring provides real-time signal

quality assessment. The instrument operates in paired configurations for end-to-end link testing or singularly with remote loopback capability. All units ship with NIST traceable calibration.Typical Applications Optical transceiver validation (CFP2, CFP4, QSFP28) Active cable testing Network equipment characterization High-speed data link validation Signal integrity and jitter analysis Timing performance assessmentCompatibility & Integration The pB100A4 supports testing of CFP2, CFP4, QSFP28 transceivers and active cables. The 4×10G electrical interface accommodates standard high-speed transceiver form factors. Two units paired together enable bidirectional link testing; single-unit operation with external loopback provides alternative test configurations. Product Status: Discontinued December 31, 2017. End-of-service and support: December 31, 2020.

Features & description

From manufacturer datasheet

Features

• Four-lane pattern generation and checking • Rate options: 9.93–11.8 Gbit/s and/or 24–30 Gbit/s • Presets: 100GBASE-R4, OTL4, 128G Fibre Channel • PRBS 7/9/15/23/31 plus SSPR, CID, 128-bit user • Separate 0/1 error counts • Optional receiver eye monitoring software • Daisy-chain sync for up to 4 units / 12 channels • Compact low-power design with K-connector cables

Applications

• QSFP28/CFP4/CFP2 transceiver validation • PRBS generation and BER checking in production • Active cable multi-lane testing (daisy-chain up to 12 channels) • Trade-show / demo PRBS generation • Automated ATE integration via API

PB100A4 Characteristics / Specifications

PARAMETER	VALUE
Model	pB100A4
Manufacturer	EXFO (pocketBERT)
Instrument Type	Quad Channel BERT / Pattern Generator
Alias	pB100A4; PB100A4 Pattern Generator
Channel count	4
Tx data rate option	9.93 to 11.8 Gbit/s
Combined option	9.93 to 11.8 and 24 to 30 Gbit/s
Tx amplitude at 28 Gbit/s	1000 mV
Tx rise/fall typical	12 ps
Tx jitter telecom max	0.08 UIpp
Tx jitter Ethernet mode max	0.28 UIpp
Tx impedance typical	50/100 Ω SE/differential
Error insertion min/max	1 to 512
Rx data rate	same options as Tx
Rx sensitivity	40 mV differential
Rx compensation peaking at 15 GHz	0 to 7 dB
Rx impedance typical	50/100 Ω SE/differential
Lowest BER typical	5×10^−12 class (datasheet 5 × 10^-12)
Clock out line rates	1/8, 1/16, 1/32, 1/40, 1/80, 1/160
Clock out SE amplitude typical	300 mV
Clock in differential amplitude	400 to 1200 mV
SizeHxWxD	178 mm x 127 mm x 50.8 mm (7 in x 5 in x 2 in)
Cable length class	~280 mm (11 in)
Weight	0.9 kg
Operating temperature	0 °C to 40 °C

PARAMETER	VALUE
Relative humidity	0 % to 80 % non-condensing at 40 °C
DC input	5 V, 4 A maximum
Power dissipation typical	15 W
Signal connectors	2.92 mmKClock connectors: SMA
Patterns PRBS	2^7-1; 2^9-1; 2^15-1; 2^23-1; 2^31-1
Other patterns	Square; SSPR; CID; 128-bit user-defined
Preset rates	25.78125; 27.95; 28.05 Gbit/s class
Compliance	RoHS; CE Notes Specs from EXFO/pocketBERT pB100A4 discontinued datasheet (SPPB100A4). Confirm rate option (10 / 25 / 10-25), EYE software, and cable connector kit on the unit. Size depth listed as 2 in on OEM sheet.
Rate options	9.93–11.8 Gbit/s and/or 24–30 Gbit/s
Presets	100GBASE-R4, OTL4, 128G Fibre Channel
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General Specifications & Supplementary Characteristics

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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

Technical Specifications

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Notes
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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

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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.