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Data Sheet

July 30, 2026

TEKTRONIX

Tektronix PPG3202 32 Gb/s programmable pattern generator, 2 channels

Tektronix PPG3202 32 Gb/s programmable pattern generator, 2 channels The Tektronix PPG3202 is a two-channel member of the PatternPro PPG3200 Series high-performance programmable pattern generators. Tektronix documentation describes it as a fully integrated benchtop instrument designed for high-speed receiver and link testing, with programmable data rates up to 32 Gb/s and support for both built-in PRBS and user-defined patterns. The PPG3202 is intended for high-speed serial and datacom test applications including 100 Gigabit Ethernet, 32G Fibre Channel, PAM4, DP-QPSK testing, and general receiver characterization. It can also be paired with Tektronix PED series error detectors to build a complete BER test solution. The Tektronix PPG3202 is a two-channel member of the PatternPro PPG3200 Series high-performance programmable pattern generators. Tektronix documentation describes it as a fully integrated benchtop instrument designed for high-speed receiver and link testing, with programmable data rates up to 32 Gb/s and support for both built-in PRBS and user-defined patterns. The PPG3202 is intended for high-speed serial and datacom test applications including 100 Gigabit Ethernet, 32G Fibre Channel, PAM4, DP-QPSK testing, and general receiver characterization. It can also be paired with Tektronix PED series error detectors to build a complete BER test solution.



MODEL

**Tektronix
PPG3202**

CALIBRATION

**Available on
request**

CONDITION

Used

STATUS

In stock

RFQ / SKU

PPG3202

LISTING

<https://aumictechlabs.com/products/ppg3202-2/>

NIST-traceable cal

SAM registered

30-day returns

NAICS 423690 • 811210 • 541380

This unit

The Tektronix PPG3202 is a dual-channel programmable pattern generator engineered for high-speed digital signal generation up to 32 Gb/s per channel. It delivers precise, low-jitter output suitable for telecommunications, data communications, and semiconductor testing applications. The instrument generates built-in PRBS sequences and user-defined patterns with multi-channel synchronization, supporting demanding receiver characterization and signal integrity validation across modern high-speed protocols.

Technical Specifications

Data Rate: 32 Gb/s per channel
Channels: 2 (dual-channel)
Output Amplitude (Single-Ended): 300 mV to 1.0 V, programmable
Output Amplitude (Differential): 600 mV to 2.0 V, programmable
DC Offset Window: -2 V to +3 V, programmable
Rise/Fall Time: 11 ps (20% to 80%); 16 ps (10% to 90%)
Output Impedance: 50 Ω single-ended; 100 Ω differential
Data Output Jitter: 250 fs RMS typical (PRBS 2¹¹-1 at 32 Gb/s)
Crossing Point: 35% to 65%, programmable
Jitter Insertion Modes: BUJ, SJ, RJ, PJ
Clock Source: Full-rate, built-in adjustable; external clock input 16 GHz to 32 GHz
External Clock Input: 400 mVp-p typical, AC coupled
Data Output: DC-coupled differential
Connectors: 2.4 mm

Key Features

Multi-channel synchronized outputs for pattern-independent data generation
PRBS and custom pattern support with programmable sequences
Low inherent jitter for high signal integrity
Front panel touch-screen GUI and USB computer control

Typical Applications

100 Gigabit Ethernet testing
32G Fibre Channel characterization
PAM4 and DP-QPSK signal generation
Semiconductor receiver testing and validation
Crosstalk immunity assessment

Compatibility & Integration

USB control interface enables seamless integration into automated test environments and allows remote instrument configuration and data management.

Features & description

From manufacturer datasheet

Features

- 2 differential output channels
- Programmable data rate up to 32 Gb/s
- Fully integrated benchtop pattern generator
- Independent data on each channel
- Independent channel skew adjustment
- Independent channel pattern bit shift
- User-programmable data patterns and built-in PRBS patterns
- Adjustable internal clock source
- Full-rate programming with 10 kb/s resolution
- Selectable prescaler output
- Fast rise/fall time PPG3200-series architecture
- Optional high-frequency and low-frequency jitter insertion

PPG3202 Characteristics / Specifications

PARAMETER	VALUE
Model	PPG3202
Instrument Type	Programmable Pattern Generator
Series	PatternPro PPG3200 Series
Channels	2 differential channels
Maximum Data Rate	32 Gb/s
Programmable Data Rate Range	1.5 Gb/s to 32 Gb/s
Data Rate Resolution	10 kb/s
Data Rate Accuracy	+/-5 ppm
Output Pattern Types	User data from memory or PRBS
PRBS Lengths	2 ⁷ -1, 2 ⁹ -1, 2 ¹¹ -1, 2 ¹⁵ -1, 2 ²³ -1, 2 ³¹ -1
Output Connector Type	2.4 mm data and clock connectors
Crossing Point	Programmable
Channel Functions	Independent data, skew adjustment, and pattern bit shift
Clock Source	Adjustable internal clock source with external clock input support
External Clock Input Range	16 GHz to 32 GHz for PPG3200 series
Trigger Capability	Pattern trigger or clock divided-by-N trigger
Data Output Jitter	250 fs RMS typical random jitter at 32 Gb/s using PRBS 2 ¹¹ -1 pattern
Jitter Options	Option HFJIT for high-frequency SJ/RJ/BUJ insertion; Option LFJIT for low-frequency jitter insertion
Power Requirement	100 V to 240 V, 50 Hz to 60 Hz
Maximum Power Consumption	360 W Mechanical And Interface Notes The PPG3202 is a benchtop instrument. Tektronix documentation identifies 2.4 mm RF connectors for the PPG3200 series data and clock paths, with additional SMA connections used for other front-panel RF interfaces.
Data Rate	up to 32 Gb/s - Fully integrated benchtop pattern generator - Independent data on each channel - Independent channel skew adjustment - Independent channel pattern bit shift - User-programmable data patterns and built-in PRBS patterns - Adjustable int

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 programmable pattern generators. Tektronix documentation describes it asafully integrated benchtop instrument designed for high-speed receiver and link testing, with programmable data rates up to 32 Gb/s and support for both built-in PRBS and user-defined patterns.

Applications

The PPG3202 is intended for high-speed serial and datacom test applications including 100 Gigabit Ethernet, 32G Fibre Channel, PAM4, DP-QPSK testing, and general receiver characterization. It can also be paired with Tektronix PED series error detectors to buildacomplete BER test solution.

Key Features

- 2 differential output channels
- Programmable data rate up to 32 Gb/s
- Fully integrated benchtop pattern generator
- Independent data on each channel
- Independent channel skew adjustment
- Independent channel pattern bit shift
- User-programmable data patterns and built-in PRBS patterns
- Adjustable internal clock source
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Model	PPG3202
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Series	PatternPro PPG3200 Series
Channels	2 differential channels
Maximum Data Rate	32 Gb/s
Programmable Data Rate Range	1.5 Gb/s to 32 Gb/s
Data Rate Resolution	10 kb/s
Data Rate Accuracy	+/-5 ppm
Output Pattern Types	User data from memory or PRBS
PRBS Lengths	2^7-1, 2^9-1, 2^11-1, 2^15-1, 2^23-1, 2^31-1
Output Connector Type	2.4 mm data and clock connectors

Output Amplitude, Single-Ended: 300 mV to 1 V adjustable
Output Amplitude, Differential: 600 mV to 2 V

Specifications

PARAMETER	VALUE
Crossing Point	Programmable
Channel Functions	Independent data, skew adjustment, and pattern bit shift
Clock Source	Adjustable internal clock source with external clock input support
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Mechanical And Interface Notes

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Use Notes

The instrument supports aligned, pattern-independent multi-channel outputs for crosstalk and multi-channel testing. It is suitable for stressed-signal and receiver test workflows and may be used with external combining hardware for PAM4 signal generation.

Notes

This manual OEM source was compiled from official Tektronix PatternPro PPG1600, PPG3000, and PPG3200 series datasheet, user manual, and installation/safety documentation covering the PPG3202.

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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Technical content from manufacturer specifications. Unit photo/stock from Aumictech listing when available. Specifications subject to OEM documentation and unit condition.