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Data Sheet

August 15, 2026

AGILENT / KEYSIGHT

Agilent/Keysight E4201A

Keysight E4201A 2.048 Mb/s E1 Line Interface The Keysight E4201A is a single-slot C-size VXI line interface for the Broadband Series Test System. It generates and analyzes ATM cell streams mapped into 2.048 Mb/s E1 framing with terminal, monitor, loopback, and drop-and-insert modes. E1 ATM physical-layer and cell-layer testing, stress generation with AIS/RAI and bit errors, and foreground/background channel loading up to 1.920 Mb/s. E1 symmetrical RJ45 and coaxial BNC interfaces The Keysight E4201A is a single-slot C-size VXI line interface for the Broadband Series Test System. It generates and analyzes ATM cell streams mapped into 2.048 Mb/s E1 framing with terminal, monitor, loopback, and drop-and-insert modes. E1 ATM physical-layer and cell-layer testing, stress generation with AIS/RAI and bit errors, and foreground/background channel loading up to 1.920 Mb/s. E1 symmetrical RJ45 and coaxial BNC interfaces One foreground plus up to 100 background ATM channels



MODEL

**Agilent / Keysight
E4201A**

CALIBRATION

**Available on
request**

CONDITION

Used

STATUS

In stock

RFQ / SKU

E4201A

LISTING

<https://aumictechlabs.com/products/e4201a-2/>

NIST-traceable cal

SAM registered

30-day returns

NAICS 423690 · 811210 · 541380

This unit

The Agilent/Keysight E4201A is a 2.048 Mb/s E1 line interface module designed as a single-slot C-size VXI card for integration into Broadband Series Test System (BSTS) mainframes. It generates and analyzes ATM cell streams encapsulated within E1 framing, enabling testing at both the physical layer and ATM cell layer. Technical Specifications The E4201A operates at 2.048 Mb/s conforming to E1 framing standards. Clock modes include internal (stratum 3), external, and

recovered clock configurations. External clock input accepts TTL signals at 50 ohm nominal impedance via SMB connector. Transmit and receive trigger outputs are delivered on SMB connectors with TTL output and 50 ohm nominal impedance. Maximum power dissipation is 25 Watts. The module measures 1.3 kg nominal.

Key Features The E4201A generates and analyzes ATM cell streams with flexible traffic simulation capabilities. A foreground channel stimulates the device under test, while up to 100 background channels support load testing. Fill cells occupy unused bandwidth. The module creates normal and abnormal test traffic, including erroneous patterns to assess protocol robustness. Error insertion and measurement functions include bit error rate testing via PRBS pattern injection and analysis. Cell delay and interarrival time measurements are achieved through timestamp insertion in transmitted cells. Physical layer error and alarm generation simulates stress conditions and abnormal network states. Incorrect byte insertion enables error stressing of test signals.

Operational Modes The E4201A supports terminal mode operation as a test endpoint. Monitor mode observes network traffic without insertion. Near-end and far-end loopback modes return signals for diagnostic testing. Drop-and-insert functionality allows selective traffic segment insertion or removal.

Compatibility & Integration The module integrates as a C-size VXI card within Agilent/Keysight E4200 or E4210 series BSTS mainframes. Front panel connectors accommodate TE or NT symmetrical line interface connections. Clock and trigger I/O via SMB connectors enable synchronization with external test equipment.

E4201A Characteristics / Specifications

PARAMETER	VALUE
Model	E4201A
Instrument Type	E1 ATM line interface module
Line Rate	2.048 Mb/s
Card Format	1 slot C-size VXI
Mass	1.3 kg 2.9 lb nominal
Power Dissipation Maximum	25 W
Total Bandwidth	1.920 Mb/s
Foreground Bandwidth Range	100 b/s to 1.920 Mb/s
Foreground Bandwidth Accuracy	plus or minus 0.02 ppm
Foreground Channel Depth	1500 cells variable
Background Channels Maximum	100
Background Bandwidth Range	3 kb/s to 1.920 Mb/s
Background Bandwidth Accuracy	plus or minus 10 ppm
Background Channel Depth	16 cells
Capture Memory	1500 cells
Event Trigger Pre Post	749 pre 1 trigger 750 post
Timestamp Resolution	100 ns
Measurement Sample Interval	100 ms
Measurement Period Range	1 second to 3 days
Symmetrical Impedance	120 ohm RJ45
Coaxial Impedance	75 ohm BNC
Input Levels Symmetrical	0 dB or 20 dB
Output Levels Symmetrical	-4 dB or 0 dB
External Clock Input	SMB TTL nominal 50 ohm
Bit Error Injection Rates	1e-3 to 1e-9

PARAMETER	VALUE
SAR PDU Support	AAL-0 AAL-1
Bandwidth	1.920 Mb/s

E4201A Specifications

PARAMETER	VALUE
Keysight E4201A 2.048 Mb/s E1 Line Interface	Overview
Key Features	E1 symmetrical RJ45 and coaxial BNC interfaces
One foreground plus up to 100 background ATM channels	Capture memory of 1500 cells with event triggers
Technical Specifications	Model: E4201A
Notes	Numeric rows from Agilent E4201A 2.048 Mb/s E1 Line Interface technical specifications 5965-6758E.

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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Notes

Numeric rows from Agilent E4201A 2.048 Mb/s E1 Line Interface technical specifications 5965-6758E.

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.