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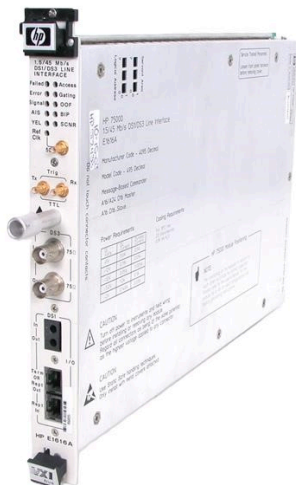
Data Sheet

August 15, 2026

AGILENT / KEYSIGHT

Agilent/Keysight E1616A

HP Agilent E1616A 1.5/45 Mb/s DS1/DS3 Line Interface The Agilent E1616A is a single-slot C-size VXI line interface for the Broadband Series Test System. OEM 5965-6755E describes generation and analysis of ATM cell streams inside DS1 or DS3 framing, with DS3 direct mapping per ANSI T1S1/94-243, DS3 PLCP per UNI 3.0, DS1 direct mapping per ITU-T G.804, and DS1 PLCP per Bellcore TR-TSV-000773. DS1/DS3 ATM physical-layer and cell-layer testing, PLCP stressing, and foreground/background loading in E4200/E4210 BSTS chassis with optional E4209 Cell Protocol Processor. The Agilent E1616A is a single-slot C-size VXI line interface for the Broadband Series Test System. OEM 5965-6755E describes generation and analysis of ATM cell streams inside DS1 or DS3 framing, with DS3 direct mapping per ANSI T1S1/94-243, DS3 PLCP per UNI 3.0, DS1 direct mapping per ITU-T G.804, and DS1 PLCP per Bellcore TR-TSV-000773. DS1/DS3 ATM physical-layer and cell-layer testing, PLCP stressing, and foreground/background loading in E4200/E4210 BSTS chassis with optional E4209 Cell Protocol Processor.



MODEL

**Agilent / Keysight
E1616A**

CALIBRATION

**Available on
request**

CONDITION

Used

STATUS

In stock

RFQ / SKU

E1616A

LISTING

<https://aumictechlabs.com/products/e1616a-2/>

NIST-traceable cal

SAM registered

30-day returns

NAICS 423690 · 811210 · 541380

This unit

The Agilent/Keysight E1616A is a single-slot line interface module for the E4200/E4210 Broadband Series Test System designed to generate and analyze ATM cell streams over DS1 (1.5 Mb/s) and DS3 (45 Mb/s) framing formats. It enables physical and ATM cell layer testing for comprehensive

evaluation of high-speed ATM transmission and protocol performance across R&D, product development, field trials, and QA environments.

Technical Specifications

Line Interface & Framing

- Operates over DS1 at 1.5 Mb/s and DS3 at 45 Mb/s
- DS3 direct mapping compliant with ANSI draft T1S1/94-243
- DS3 PLCP mapping compliant with UNI Version 3.0
- DS1 direct mapping compliant with ITU recommendation G.804
- DS1 PLCP mapping compliant with Bellcore TR-TSV-000773 Issue 1 (June 1991)

Traffic Generation & Analysis

- Internal traffic generator with 1 foreground channel
- Up to 100 background channels for load simulation
- Support for fill cells to occupy unused bandwidth
- ATM cell capture: up to 1500 cells (manual or event-triggered)
- PLCP frame capture: 256 frames with pre/post-trigger buffering
- Cell error, loss, and delay measurement capability
- Traffic playback from captured data

Key Features

- Selectable DS1 or DS3 operational mode
- Direct or PLCP mapping selection
- Terminal, Repeater, and Local Loopback operational modes
- Physical layer measurements
- Error and alarm generation for stress testing
- Manual and event-triggered capture with asymmetric pre/post buffering (750/750 cells for ATM; 128/128 frames for PLCP)
- Optional integration with E4209 Cell Protocol Processor for enhanced test traffic generation

Typical Applications

The E1616A supports validation and troubleshooting of ATM network equipment across development, manufacturing, and deployment phases through cell-layer traffic generation, error injection, and comprehensive performance analysis.

Compatibility & Integration

Designed exclusively for the Agilent/Keysight E4200/E4210 Broadband Series Test System as a single-slot module. Works with the optional E4209 Cell Protocol Processor for extended protocol testing capabilities.

E1616A Characteristics / Specifications

PARAMETER	VALUE
Model	E1616A
Instrument Type	DS1/DS3 ATM line interface
Card Format	1 slot C-size VXI
Mass	1.3 kg (2.9 lb) nominal
Power Dissipation Maximum	25 W
Ds1 Line Rate	1.544 Mb/s
Ds3 Line Rate	44.736 Mb/s plus or minus 10 ppm
Ds1 Total Bandwidth	1.413 Mb/s
Ds3 Total Bandwidth	40.704 Mb/s
Foreground Bandwidth Accuracy	plus or minus 0.02 ppm
Foreground Channel Depth	1500 cells variable
Background Channels Maximum	100
Background Bandwidth Accuracy	plus or minus 10 ppm
Background Channel Depth	16 cells
Timestamp Resolution	100 ns
Capture Memory Cells	1500
Plcp Capture Frames	256
Measurement Sample Interval	100 ms
Measurement Period Range	1 second to 3 days
Ds1 Input Connector	RJ48C or Bantam, 100 ohm
Ds3 Connector	BNC 75 ohm B3ZS
Ds1 Output Peak Levels	High 9.5 V, Xconnect 6.0 V, Low 3.8 V
Ds3 Output Peak Levels	High 850 mV, Xconnect 710 mV, Low 300 mV
Clock Modes	Internal stratum 3, External, Recovered
Bandwidth	1.413 Mb/s

E1616A Specifications

PARAMETER	VALUE
HP Agilent E1616A 1.5/45 Mb/s DS1/DS3 Line Interface	Overview
Key Features	Selectable DS1 or DS3 mode with direct or PLCP mapping
Capture of 1500 ATM cells or 256 PLCP frames	Physical, PLCP, and ATM statistics sampled every 100 ms
Technical Specifications	Model: E1616A
Notes	Numeric rows from Agilent E1616A 1.5/45 Mb/s DS1/DS3 Line Interface technical specifications 5965-6755E Rev B.

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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Ds1 Input Connector	RJ48C or Bantam, 100 ohm
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Clock Modes	Internal stratum 3, External, Recovered

Notes

Numeric rows from Agilent E1616A 1.5/45 Mb/s DS1/DS3 Line Interface technical specifications 5965-6755E Rev B.

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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NIST-traceable calibration · SAM registered ·
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.