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Data Sheet

August 15, 2026

AGILENT / KEYSIGHT

Agilent/Keysight E6282A

HP Agilent E6282A 10/100 Mb/s Ethernet Frame Processor The Agilent E6282A is a dual-port 10/100 Ethernet frame processor for the Broadband Series Test System. OEM 5965-8902E specifies RJ45 or MII media, 10BaseT or 100BaseTX, full or half duplex with auto-negotiation, eight traffic streams per port, more than 200 real-time measurements, and a 12 Mbyte capture buffer per port. Native Ethernet stimulus/response, LAN-ATM and LAN-WAN interworking with E4209B/E4206A/E4207A, and RFC2215 TSPEC conformance in E4200B/E4210B chassis. The Agilent E6282A is a dual-port 10/100 Ethernet frame processor for the Broadband Series Test System. OEM 5965-8902E specifies RJ45 or MII media, 10BaseT or 100BaseTX, full or half duplex with auto-negotiation, eight traffic streams per port, more than 200 real-time measurements, and a 12 Mbyte capture buffer per port. Native Ethernet stimulus/response, LAN-ATM and LAN-WAN interworking with E4209B/E4206A/E4207A, and RFC2215 TSPEC conformance in E4200B/E4210B chassis. Two fully featured 10/100 ports per module



MODEL

**Agilent / Keysight
E6282A**

CALIBRATION

**Available on
request**

CONDITION

Used

STATUS

In stock

RFQ / SKU

E6282A

LISTING

<https://aumictechlabs.com/products/e6282a-2/>

NIST-traceable cal

SAM registered

30-day returns

NAICS 423690 • 811210 • 541380

This unit

The Agilent/Keysight E6282A is an Ethernet Frame Processor that adds LAN interworking and native Ethernet testing capabilities to the Broadband Series Test System. This module generates Layer 3 Protocol Data Units such as IP, which can be transmitted individually or integrated into

complex traffic streams via its integrated traffic generator. On reception, the E6282A filters specific LAN traffic for detailed analysis, delivering real-time statistical monitoring, multifunction triggering, and traffic capture with playback functionality. Technical Specifications Ethernet Processing Supports 10/100 Mb/s Ethernet frame processing Generates and processes Protocol Data Units (PDUs) including IP Integrates traffic generation for complex stream creation Analysis and Monitoring Real-time statistical monitoring of received traffic Multifunction triggering for advanced test control Traffic filtering for selective analysis Capture and playback of network traffic

Key Features PDU creation with frame-level control over Layer 3 protocols Dual-mode operation: transmission of generated streams and reception with filtering Real-time measurement and statistical analysis Multifunction triggering enables conditional capture and test sequencing Traffic playback supports regression testing and traffic replay scenarios

Typical Applications LAN protocol compliance and interoperability testing Ethernet traffic generation and analysis Layer 3 protocol testing within broadband environments Network device validation with complex traffic patterns Statistical performance monitoring of Ethernet interfaces

Compatibility & Integration Designed for seamless integration into the Keysight Broadband Series Test System. Operates as a module within that platform, extending test capabilities for LAN and Ethernet validation.

E6282A Characteristics / Specifications

PARAMETER	VALUE
Model	E6282A
Instrument Type	dual port Ethernet frame processor
Port Count	2 Tx/Rx ports
Line Rates	10 Mb/s or 100 Mb/s
Media	RJ45 or MII
Duplex Modes	full duplex or half duplex
Auto Negotiation Advertise	10BaseT and 100BaseTx half and full duplex
Traffic Streams Per Port	8
Interframe Gap	23, 24, 25, or 26 nibbles (default 24)
Capture Buffer Per Port	12 Mbytes
Timestamp Resolution	100 ns
Generic Filter Length	64 octets maximum
Trigger Output Pulse Width	30 ns active high TTL
Trigger Output Impedance	50 ohm
External Trigger Input	SMB TTL rising edge 50 ohm to 0 V
Statistics Integration Period	1 s to 72 h
Rip Update Default Interval	30 s
Rip Metric Range	1 to 16 (default 1)
Form 7 Max Modules	5 (10 Ethernet ports)
Form 13 Max Ports Class	20 Ethernet ports with 10 modules
Card Format	1 slot C-size VXI
Mass	1 kg (2.2 lb) nominal
Power Dissipation Maximum	25 W
Operating Temperature	0 to 45 C
Storage Temperature	minus 40 to 70 C

PARAMETER

VALUE

Humidity

0 to 95 percent RH from 25 to 40 C

Controller Ram Recommended

64 MB or 128 MB (32 MB minimum not recommended)

General Specifications & Supplementary Characteristics

PARAMETER	VALUE
Storage temperature	minus 40 to 70 C
Operating temperature	0 to 45 C
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Humidity	0 to 95 percent RH from 25 to 40 C
Controller Ram Recommended	64 MB or 128 MB (32 MB minimum not recommended) Notes Numeric rows from Agilent E6282A 10/100 Mb/s Ethernet Frame Processor specifications 5965-8902E.

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

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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

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.