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Data Sheet

August 13, 2026

KEYSIGHT / AGILENT / HP

Keysight / Agilent / HP E1421-66501 VXI 6-Slot Backplane Module for E1421B

The Keysight E1421-66501 is a VXI 6-slot backplane module engineered for the E1421B C-size mainframe. This module delivers the essential backplane infrastructure required for a 6-slot VXI system, establishing connectivity and signal integrity across installed modules. It complies fully with VXIbus specifications and integrates proven thermal management and serviceability features. Aumictech offers NIST-traceable calibration and repair for the Keysight / Agilent / HP E1421-66501. Calibration covers all module-specific parameters per manufacturer datasheet, output accuracy and linearity, frequency accuracy, and VXI register and trigger bus compliance. All calibrations ship with a NIST-traceable certificate. Turnaround is typically 1-3 business days after receipt. Common Keysight / Agilent / HP E1421-66501 faults: relay contact wear, DAC/ADC drift, VXI backplane connector oxidation. Commo

**MODEL****Keysight / Agilent /
HP E1421-66501****CALIBRATION****Available on
request****CONDITION****Used****STATUS****In stock****RFQ / SKU****E1421-66501****LISTING**[https://aumictechlabs.c
om/products/e1421-665
01-2/](https://aumictechlabs.com/products/e1421-66501-2/)

NIST-traceable cal

SAM registered

30-day returns

NAICS 423690 · 811210 · 541380

This unit

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with VXIbus specifications and integrates proven thermal management and serviceability features. Technical Specifications Model: E1421-66501 Product Type: VXI Backplane Module Form Factor: C-size Slot Count: 6 slots Mainframe Compatibility: E1421B VXI mainframe VXIbus Compliance: Meets VXIbus Specification standard Power Input: 100–240 VAC Key Features

Connectivity Architecture The backplane utilizes dual VXIbus connector pairs for comprehensive signal distribution. The P1 connector carries the 16-bit data transfer bus, 24-bit addressing, and power voltages (+5V, +/-12V). The P2 connector expands the data interface to 32-bit, adds a 10 MHz clock bus, analog sumbus, TTL and ECL trigger buses, and supplies additional power rails (-5.2V, -2V, +/-24V). Insertion & Extraction Injector surface rails enable the QUIC system for fast, tool-free module insertion and extraction, reducing setup time and mechanical stress on connectors. Thermal Management The Pressurized Air Channel cooling system delivers clean, uniform airflow directed through the right side and exhausted through the left, maintaining optimal operating temperatures across all module slots. Power Supply Access Rear-panel power input simplifies power supply serviceability and reduces mainframe downtime during maintenance.

Typical Applications This backplane module suits cost-effective VXI configurations requiring 6 slots without the footprint of larger mainframes. Ideal for portable and rack-mount test systems, measurement platforms, and signal processing applications in laboratory and production environments. Compatibility & Integration The E1421-66501 functions as an integral component of the E1421B mainframe ecosystem, managing VXIbus device interconnection, power distribution, and thermal control. Its compact C-size form factor and modular design enable flexible instrument configurations while maintaining full compliance with VXIbus standards for cross-vendor module interoperability.

Features & description

From manufacturer datasheet

Applications

- E1421B 6-slot backplane replacement

E142166501 Characteristics / Specifications

PARAMETER	VALUE
Model	E1421-66501
Manufacturer	Hewlett Packard / Agilent / Keysight
Instrument Type	6 Slot VXI Backplane
Alias	E1421-66501
Slot Count	6
VXI Size	C-size
Parent Mainframe	E1421B
Function	VXI backplane PCA
Related 13 Slot	E1401 66521 13-slot backplane
Form	backplane printed-circuit assembly
NotAMainframe	backplane only
Buses	VXI P1/P2 power and buses
Status	HP E1421B service part
Installation	E1421B chassis service
ESD	multilayer PCA
Documentation	E1421B service backplane
Power Distribution	6-slot power planes
Compatibility	E1421B
Use	replace damaged backplane
Identification	E1421-66501
Cooling Parent	E1421B fans
Safety	disconnect mains and modules
Not E840x	different 13-slot family
Connectors	P1/P2 per slot Notes 6-slot C-size backplane identity from HP E1421-66501 for E1421B. Do not interchange with E1401-66521 13-slot backplane.

E142166501 Specifications

PARAMETER	VALUE
Applications	- E1421B 6-slot backplane replacement
Key Features	- 6-slot backplane E1421-66501
Technical Specifications	Model: E1421-66501
Notes	6-slot C-size backplane identity from HP E1421-66501 for E1421B. Do not interchange with E1401-66521 13-slot backplane.

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.

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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

788 S 500 E, Pleasant Grove, UT 84062
sales@aumictech.com · +1 (484) 841-9341
<https://aumictechlabs.com>

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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.