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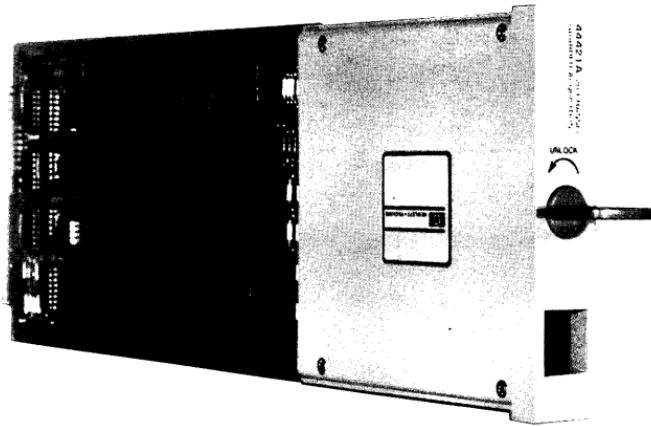
Data Sheet

August 15, 2026

AGILENT / KEYSIGHT

Agilent/Keysight 44425A

HP Agilent 44425A 16 Channel Isolated Digital Input Interrupt for 3497A The HP 44425A is a 16-channel isolated digital input/interrupt assembly for the 3497A Data Acquisition/Control Unit. OEM 3497A option tables list 44425A as option 050 Isolated Digital Input/Interrupt. Isolated inputs sense contact closures and logic levels while interrupt capability flags change-of-state to the 3497A controller. Isolated status and alarm inputs in a 3497A automated data-acquisition rack. Instrument Type: Isolated digital input/interrupt assembly The HP 44425A is a 16-channel isolated digital input/interrupt assembly for the 3497A Data Acquisition/Control Unit. OEM 3497A option tables list 44425A as option 050 Isolated Digital Input/Interrupt. Isolated inputs sense contact closures and logic levels while interrupt capability flags change-of-state to the 3497A controller. Isolated status and alarm inputs in a 3497A automated data-acquisition rack. Instrument Type: Isolated digital input/interrupt assembly Host Mainframe: 3497A Data Acquisition/Control Unit



MODEL

**Agilent / Keysight
44425A**

CALIBRATION

**Available on
request**

CONDITION

Used

STATUS

In stock

RFQ / SKU

44425A

LISTING

<https://aumictechlabs.com/products/44425a-2/>

NIST-traceable cal

SAM registered

30-day returns

NAICS 423690 • 811210 • 541380

This unit

The Agilent/Keysight 44425A is a 16-channel isolated digital input/interrupt assembly for the HP 3497A Data Acquisition/Control Unit. It operates in two distinct modes: digital input mode accepts up to 16 digital inputs for monitoring limit switches, position indicators, and digital data buses;

interrupt mode monitors up to 8 inputs (bits 0–7) and generates interrupt signals to the controller upon specified system conditions. This dual-mode architecture enables both continuous signal monitoring and event-driven program control, making it suitable for immediate reaction to level changes and transient signals.

Technical Specifications

Digital Input Channels: Up to 16

Interrupt Channels: Up to 8 (within the 16-channel set)

Operating Modes: Digital Input Mode and Interrupt Mode

System Platform: HP 3497A Data Acquisition/Control Unit

Key Features

- Isolated digital input architecture eliminates common-mode coupling issues in multi-channel sensing applications
- Interrupt-driven operation supports time-critical monitoring without continuous polling
- Configurable input allocation allows partitioning of channels between standard monitoring and interrupt functions
- Digital bus monitoring capability for complex signal validation tasks

Typical Applications

- Industrial automation and machinery status monitoring
- Limit switch and position indicator sensing
- Event-driven system control with pre-programmed responses
- Digital logic prototyping and validation

Expanding digital input capacity of existing data acquisition systems

Compatibility & Integration

The 44425A integrates directly into the HP 3497A mainframe. When paired with an Actuator/Digital Output Assembly (such as Option 110), it forms an independent digital input/output port, enabling bidirectional digital control within test and measurement systems.

44425A Characteristics / Specifications

PARAMETER	VALUE
Model	44425A
Instrument Type	Isolated digital input/interrupt assembly
Host Mainframe	3497A Data Acquisition/Control Unit
Catalog Option Code	050 on 3497A
Channel Count	16
Isolation	isolated digital inputs
Interrupt	change-of-state interrupt to 3497A
Related Actuator	44428A 16-channel actuator/digital output
Related Mux	44421A 20-channel analog multiplexer
Related Counter	3497A option 060 100 kHz counter class
Form Factor	3497A plug-in assembly
Manufacturer	HP Agilent Keysight
Use Case	isolated digital sense in 3497A
Control	3497A HP-IB digital commands
Operating Temperature Class	3497A laboratory window
Literature	HP 3497A option table 44425A Isolated Digital Input/Interrupt
Family	3497A plug-in assemblies
System Role	digital input and interrupt
Documentation Type	OEM 3497A plug-in table
Brand Lineage	Hewlett Packard Agilent Keysight
Related Mainframe Display	3497A front-panel keyboard and display
Year Class	3497A 1980s DAQ family
Operating temperature	Class: 3497A laboratory window

44425A Specifications

PARAMETER	VALUE
Applications	Isolated status and alarm inputs in a 3497A automated data-acquisition rack.
Interrupt on change of state	3497A option 050
Technical Specifications	Model: 44425A

General Specifications & Supplementary Characteristics

PARAMETER	VALUE
Operating temperature	Class: 3497A laboratory window
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Operating Temperature Class	3497A laboratory window
Literature	HP 3497A option table 44425A Isolated Digital Input/Interrupt
Family	3497A plug-in assemblies
System Role	digital input and interrupt
Documentation Type	OEM 3497A plug-in table
Brand Lineage	Hewlett Packard Agilent Keysight
Related Mainframe Display	3497A front-panel keyboard and display
Year Class	3497A 1980s DAQ family Notes From HP 3497A option 050 / 44425A Isolated Digital Input/Interrupt listings (16 channels). Isolation voltage, input threshold, and interrupt latency are on the 44425A specification page of the 3497A manuals.

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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Ordering Information

OPTION	DESCRIPTION
Option 050	Isolated Digital Input/Interrupt. Isolated inputs sense contact closures and logic levels while interrupt capability flags change-of-state to the 3497A controll
Option 060	100 kHz counter class

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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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.