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Data Sheet

August 13, 2026

KEYSIGHT / AGILENT / HP

Keysight / Agilent / HP Z2404A 64-Channel Isolated Digital Input/Interrupt Module

HP Agilent Z2404A 64-Channel Isolated Digital Input/Interrupt Module The HP Z2404A is a 64-channel isolated digital input and interrupt module for HP/Agilent VXI or system digital I/O families. Isolated inputs protect the backplane from field voltages and can generate interrupts on input change. Contrast with E1458A 96-channel non-isolated DIO. Manufacturer: Hewlett Packard / Agilent / Keysight Instrument Type: Isolated Digital Input Interrupt Module The HP Z2404A is a 64-channel isolated digital input and interrupt module for HP/Agilent VXI or system digital I/O families. Isolated inputs protect the backplane from field voltages and can generate interrupts on input change. Contrast with E1458A 96-channel non-isolated DIO. Manufacturer: Hewlett Packard / Agilent / Keysight Instrument Type: Isolated Digital Input Interrupt Module Isolation: channel/field isolation versus backplane



MODEL

**Keysight / Agilent /
HP Z2404A**

CALIBRATION

**Available on
request**

CONDITION

Used

STATUS

In stock

RFQ / SKU

Z2404A

LISTING

[https://aumictechlabs.c
om/products/z2404a-
2/](https://aumictechlabs.com/products/z2404a-2/)

NIST-traceable cal

SAM registered

30-day returns

NAICS 423690 · 811210 · 541380

This unit

The Keysight Z2404A is a 64-channel isolated digital input/interrupt module for VXIbus systems, delivering high-density signal monitoring and interrupt handling in noise-prone industrial and laboratory environments. Optically isolated inputs withstand up to 125 V rms or Vdc, while jumper-

selectable thresholds and programmable debounce accommodate diverse signal conditioning requirements. The module supports four input voltage levels - 5 Vdc, 12 Vdc, 24 Vdc, and 48 Vdc - with configurable minimum thresholds of 1, 2.5, 7, or 14 Vdc and maximum thresholds of 4, 9.5, 17, or 31 Vdc. All 64 channels generate maskable, edge-selectable interrupts with two independent debounce settings for channel groups 1-32 and 33-64, ranging from 16 μ s to 1074 seconds in binary increments.

Technical Specifications

Channels: 64 isolated digital inputs

Input Voltages: 5 Vdc, 12 Vdc, 24 Vdc, 48 Vdc

Input Thresholds: Jumper-selectable minimum (1, 2.5, 7, or 14 Vdc) and maximum (4, 9.5, 17, or 31 Vdc)

Input Current: 0.5 mA, 1.3 mA, 2.8 mA, or 5.8 mA at nominal voltages

Maximum Input Voltage: 60 Vdc per channel; 125 V rms or Vdc between channels or to chassis

Isolation: Optically isolated, rated 125 V rms or Vdc

Debounce: Programmable 16 μ s to 1074 seconds, binary increments; two independent settings for channel groups 1-32 and 33-64

Interrupts: 64 maskable, edge-selectable interrupts with output per 16-bit word

Read Time: 1 ms typical (16-bit register access)

Pull-up Supply: On-board 5 V with 9.4 k Ω effective resistance

Power Requirements: +5 V, +12 V, -12 V, +24 V, -24 V, -5.2 V, -2 V

Terminal Block: Removable screw-type; maximum wire size 16 AWG

Form Factor: C-size, 1-slot VXI module; P1/P2 connectors

Key Features

Register-based VXI device (A16, slave only)

Parallel strobe-in connections for 32- or 64-bit transfers

Handshake lines for each 16-channel word

TTL-compatible logic levels, 5 V maximum

On-board 5 V pull-up supply for external switch detection

Typical Applications

Industrial automation, laboratory signal monitoring, discrete input acquisition in electrically noisy environments, interrupt-driven system control.

Compatibility & Integration

VXIbus compatible. Functionally similar to Keysight E1459A and Z2404B modules. Uses legacy-style terminal block interface with non-QUIC rails.

Features & description

From manufacturer datasheet

Applications

- Isolated digital input in ATE

Z2404A Characteristics / Specifications

PARAMETER	VALUE
Model	Z2404A
Manufacturer	Hewlett Packard / Agilent / Keysight
Instrument Type	Isolated Digital Input Interrupt Module
Alias	Z2404A; HP Z2404A
Digital Channels	64
Direction	digital input (isolated)
Interrupts	input/interrupt module
Isolation	channel/field isolation versus backplane
Related E1458A	96-channel VXI DIO (non-isolated TTL class)
Host	VXI/system digital cage (confirm faceplate)
Form	plug-in digital input module
Not Output	input/interrupt not a 96-ch output driver
Voltage Field	isolated input voltage class per Z2404A sheet
Status	HP Z2404A EOL
Cooling	cage airflow
Power	backplane plus isolated field sense
Documentation	Z2404A digital input notes
Use	isolated status and interrupt
Connector	field terminal/header
Scan	interrupt or polled read
Software	SCPI/register digital input
ESD	module PCA
Compatibility	match host bus (VXI vs other)
Not Analog	digital only Notes 64-channel isolated DI/interrupt identity from HP Z2404A catalog. Field voltage and isolation volts are on the Z2404A sheet: confirm before applying inputs.

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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Notes

64-channel isolated DI/interrupt identity from HP Z2404A catalog. Field voltage and isolation volts are on the Z2404A sheet: confirm before applying inputs.

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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NIST-traceable calibration · SAM registered ·
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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.