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Data Sheet

August 15, 2026

ACROMAG

Acromag IP440-2 Isolated Digital Input Module

Acromag IP440-2 Isolated Digital Input IndustryPack Module The Acromag IP440/IP440A-2 is the mid-range isolated digital input IndustryPack with plus or minus 16 to plus or minus 40 V bipolar inputs. OEM IP440A datasheet shares the 32-channel isolated architecture with model-specific thresholds. Isolated 24 V class digital monitoring on embedded carriers with debounce and per-channel interrupts. Port-to-port and logic-to-field isolation The Acromag IP440/IP440A-2 is the mid-range isolated digital input IndustryPack with plus or minus 16 to plus or minus 40 V bipolar inputs. OEM IP440A datasheet shares the 32-channel isolated architecture with model-specific thresholds. Isolated 24 V class digital monitoring on embedded carriers with debounce and per-channel interrupts. Port-to-port and logic-to-field isolation Instrument Type: isolated digital input IndustryPack



MODEL

Acromag IP440-2

CALIBRATION

Available on request

CONDITION

Used

STATUS

In stock

RFQ / SKU

IP440-2

LISTING

<https://aumictechlabs.com/products/ip440-2/>

NIST-traceable cal

SAM registered

30-day returns

NAICS 423690 • 811210 • 541380

This unit

The Acromag IP440-2 is a 32-channel optically isolated digital input module for industrial automation systems. It monitors discrete signals across four 8-channel ports, each isolated from logic and from each other. The module protects control systems from electrical noise and ground loops, supporting bipolar input voltages from ± 16 to ± 40 V DC or AC peak. Input thresholds, debounce times, and polarity are software-programmable, eliminating hardware

configuration. Technical Specifications Input Characteristics 32 optically isolated digital input channels organized into four 8-channel ports Bipolar input voltage range: ± 16 to ± 40 V DC or AC peak Input threshold (IP440A-2): ± 6.8 V typical Input response time: 10 μ S typical (off to on), 15 μ S typical (on to off) Selectable debounce: 4 μ S, 64 μ S, 1mS, or 8mS Improved input hysteresis for noise immunity Software-programmable polarity for positive or negative transitions Change-of-state interrupts supported via paired channels Reverse polarity protection included Isolation and Protection Optical isolation across all 32 channels Port-to-port isolation and logic-to-field isolation Voltage isolation rated 250V AC rms / 250V DC continuous 1500V AC dielectric strength test (1 minute, no breakdown) ± 2.5 kV ESD protection System Interface Industry Pack (IP) module compatible with standard IP carrier cards Conforms to ANSI/VITA 4-1995 specifications 0 wait states (250ns cycle) at 8MHz clock Four 8-bit reads required to update all channels Software configuration; 200mS maximum configuration time after power-up Environmental Operating temperature: 0 to 70°C Key Features Port-level isolation eliminates ground loop issues Programmable debounce and polarity reduce firmware complexity Fast input response times (10-15 μ S) capture rapid state changes Interrupt-capable architecture for event-driven applications No jumpers or DIP switches required Typical Applications Discrete signal monitoring in PLC and DCS environments Industrial process control with high electrical noise immunity Safety-critical systems requiring galvanic isolation Multi-source signal acquisition in distributed automation Compatibility & Integration The IP440-2 integrates with any standard Industry Pack carrier board supporting VITA 4-1995. It interfaces directly with PLCs, DCS platforms, and embedded control systems. The module is a successor to the IP440, offering performance and feature enhancements.

IP440 Characteristics / Specifications

PARAMETER	VALUE
Model	IP440-2
Instrument Type	isolated digital input IndustryPack
Channel Count	32
Port Groups	4 ports of 8 channels
Bipolar Input Range	plus or minus 16 to plus or minus 40 V DC or AC peak
Input Low To High Threshold Typical	plus or minus 6.8 V
Input Response On To Off Typical	15 us
Input Response Off To On Typical	10 us
Isolation Continuous	250 V AC rms or 250 V DC
Dielectric Strength Test	1500 V AC for one minute
Debounce Selections	4 us 64 us 1 ms 8 ms
Interrupt Modes	high to low low to high change of state
IP Compliance	ANSI/VITA 4-1995
Access Time At 8 MHz	0 wait states 250 ns cycle
Plus 5 V Current Typical	65 mA
Plus 5 V Current Maximum	150 mA
Operating Temperature Standard	0 C to 70 C
Operating Temperature Extended E	minus 40 C to 85 C
Form Factor	single width IndustryPack
Series Family	Acromag IP440A
Related Models	IP440-1 IP440-3
Hysteresis	input hysteresis provided
Reverse Polarity Protection	yes
Software Configuration	no jumpers or switches
Operating temperature	Standard: 0 C to 70 C

IP440 Specifications

PARAMETER	VALUE
Applications	Isolated 24 V class digital monitoring on embedded carriers with debounce and per-channel interrupts.
Key Features	32 optically isolated inputs
Selectable debounce filtering	Drop-in IP440 family module
Technical Specifications	Model: IP440-2
Notes	Numeric rows from Acromag IP440A datasheet for IP440A-2. Existing acromag-ip440a-2.txt may coexist; this slug matches queue model IP440-2.

General Specifications & Supplementary Characteristics

PARAMETER	VALUE
Operating temperature	Standard: 0 C to 70 C
Operating Temperature	Standard: 0 C to 70 C
Operating Temperature Standard	0 C to 70 C
Operating Temperature Extended E	minus 40 C to 85 C
Form Factor	single width IndustryPack
Series Family	Acromag IP440A
Related Models	IP440-1 IP440-3
Hysteresis	input hysteresis provided
Reverse Polarity Protection	yes
Software Configuration	no jumpers or switches Notes Numeric rows from Acromag IP440A datasheet for IP440A-2. Existing acromag-ip440a-2.txt may coexist; this slug matches queue model IP440-2.

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	
Specifications	
PARAMETER	VALUE
Model	IP440-2
Instrument Type	isolated digital input IndustryPack
Channel Count	32
Port Groups	4 ports of 8 channels
Bipolar Input Range	plus or minus 16 to plus or minus 40 V DC or AC peak
Input Low To High Threshold Typical	plus or minus 6.8 V
Input Response On To Off Typical	15 us
Input Response Off To On Typical	10 us
Isolation Continuous	250 V AC rms or 250 V DC
Dielectric Strength Test	1500 V AC for one minute
Debounce Selections	4 us 64 us 1 ms 8 ms
Interrupt Modes	high to low low to high change of state
IP Compliance	ANSI/VITA 4-1995
Access Time At 8 MHz	0 wait states 250 ns cycle
Plus 5 V Current Typical	65 mA
Plus 5 V Current Maximum	150 mA
Operating Temperature Standard	0 C to 70 C
Operating Temperature Extended E	minus 40 C to 85 C
Form Factor	single width IndustryPack
Series Family	Acromag IP440A
Related Models	IP440-1 IP440-3
Hysteresis	input hysteresis provided
Reverse Polarity Protection	yes
Software Configuration	no jumpers or switches

Notes

Numeric rows from Acromag IP440A datasheet for IP440A-2. Existing acromag-ip440a-2.txt may coexist; this slug matches queue model IP440-2.

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.