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Data Sheet

August 15, 2026

ACROMAG

Acromag IP470 Digital I/O IndustryPack Module

Acromag IP470A TTL Digital I/O Industry Pack Module 48 Channels The Acromag IP470A (queue listing IP470) provides 48 bidirectional TTL/CMOS digital I/O points with interrupts, debounce, and output readback. OEM IP440/IP470 family sheets rate 0 to 5 V levels, 15 mA sink, and failsafe reset without glitching. High-density digital monitoring and control interfacing to standard relay racks from IP carriers. Failsafe power-up/reset without instantaneous toggling The Acromag IP470A (queue listing IP470) provides 48 bidirectional TTL/CMOS digital I/O points with interrupts, debounce, and output readback. OEM IP440/IP470 family sheets rate 0 to 5 V levels, 15 mA sink, and failsafe reset without glitching. High-density digital monitoring and control interfacing to standard relay racks from IP carriers. Failsafe power-up/reset without instantaneous toggling Instrument Type: TTL level digital I/O Industry Pack module



MODEL

Acromag IP470

CALIBRATION

Available on request

CONDITION

Used

STATUS

In stock

RFQ / SKU

IP470

LISTING

<https://aumictechlabs.com/products/ip470-2/>

NIST-traceable cal

SAM registered

30-day returns

NAICS 423690 • 811210 • 541380

This unit

The Acromag IP470 is a 48-channel bidirectional digital I/O IndustryPack module engineered for industrial data acquisition, process control, and automation systems. It delivers CMOS and TTL-compatible inputs and outputs across a single compact module, with support for VMEbus and PCI interfaces via carrier board selection. Up to four IP470 modules can be installed on a single carrier board to achieve 192 I/O points per system slot. Technical Specifications Channel

Configuration 48 bidirectional digital I/O channels Programmable per-line event sense with interrupt support Change-of-state interrupt capability using paired channels Input Specifications Voltage range: 0 to 5V DC Signal threshold: 1.5V typical Response time: 135 nS Input capacitance: 10 pF typical, 20 pF max Programmable debounce with hysteresis; debounce error ± 250 nS Buffered inputs with minimal hysteresis Output Specifications Open-drain CMOS architecture Voltage range: 0 to 5V DC Sink capability: 0 to 15 mA DC Output Low Voltage (VOL): 0.2V typical, 0.4V max at 12 mA Output ON Resistance: 33 Ω Turn-on time: 125 nS typical Turn-off time: 3 μ S typical Socketed 4.7 k Ω pull-up resistors with integrated 47.5 k Ω nominal alternatives Output readback verification without additional input channels Failsafe state on power-up/reset without instantaneous toggling Data Transfer & Access Compliant with ANSI/VITA 4-1995 IndustryPack specifications Supported cycle types: Input/output (IOSel*), ID read (IDSel*), Interrupt select (INTSel*) Access time at 8 MHz clock: 0 wait states (250 nS cycle) All 48 channels updated via six 8-bit read/write operations Power Requirements +5V ($\pm 5\%$): 160 mA maximum ± 12 V ($\pm 5\%$): 0 mA maximum (not used) Configuration time: 200 mS maximum post power-up

Key Features

Independent event sense inputs without mandatory interrupt assignment Noise immunity through programmable debounce and hysteresis Backward compatible with IP470A while maintaining predecessor functionality No instantaneous output toggling prevents false alarms during initialization

Typical Applications Process automation, machine control interfaces, sensor signal acquisition, relay and solenoid control, PLC integration, and distributed I/O systems requiring mixed-signal switching and feedback.

IP470 Characteristics / Specifications

PARAMETER	VALUE
Model	IP470A
Alternate Queue Model	IP470
Instrument Type	TTL level digital I/O Industry Pack module
Channels	48 bidirectional
Input Voltage Range	0 to 5 V DC
Input Signal Threshold Typical	1.5 V
Input Response Time	135 ns
Output Type	open-drain CMOS
Output Voltage Range	0 to 5 V DC
Output On Current Range	0 to 15 mA DC
Output Pull Ups Installed	4.7 kOhm socketed
Integrated Pull Ups If Removed	47.5 kOhm nominal
Turn On Time Typical	125 ns
Turn Off Time Typical	3 us
Access Time At 8 Mhz	0 wait states 250 ns cycle
Update Cycles	six 8-bit read/writes for all 48 channels
Operating Temperature Standard	0 to 70 C
Operating TemperatureEModel	-40 to 85 C
Storage Temperature	-55 to 150 C
Relative Humidity	5 to 95 percent non-condensing
Power Plus 5 V	160 mA maximum
Power Plus Minus 12 V	0 mA not used
Ip Standard	ANSI/VITA 4-1995
Carrier Example Density	192 devices with four modules on a 6U VME carrier
Operating temperature	Standard: 0 to 70 C

PARAMETER	VALUE
Humidity	5 to 95 percent non-condensing

IP470 Specifications

PARAMETER	VALUE
Key Features	48 bidirectional channels
Input debounce	Closed-loop output readback
Technical Specifications	Model: IP470A
Notes	From Acromag IP470A TTL Level Digital I/O datasheet. Queue model IP470 matches IP470A.

General Specifications & Supplementary Characteristics

PARAMETER	VALUE
Storage temperature	55 to 150 C
Operating temperature	Standard: 0 to 70 C
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Humidity	5 to 95 percent non-condensing
Operating Temperature Standard	0 to 70 C
Operating TemperatureEModel	-40 to 85 C
Relative Humidity	5 to 95 percent non-condensing
Power Plus 5 V	160 mA maximum
Power Plus Minus 12 V	0 mA not used
Ip Standard	ANSI/VITA 4-1995
Carrier Example Density	192 devices with four modules on a 6U VME carrier Notes From Acromag IP470A TTL Level Digital I/O datasheet. Queue model IP470 matches IP470A.

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	
From Acromag IP470A TTL Level Digital I/O datasheet. Queue model IP470 matches IP470A.	

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 ·
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.