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Data Sheet

August 15, 2026

ACROMAG

Acromag IP521-64 Octal Serial 422/485 Communication IndustryPack Module

Acromag IP521-64 Octal RS-422/485 Serial Industry Pack Module The Acromag IP521-64 provides eight asynchronous full-duplex RS-422B serial ports (RS-485 capable) with 64-byte transmit and receive FIFOs. OEM IP521 datasheet rates baud rates to 921.6 kbps, 1200 m typical cable length, and 16C654-family UART compatibility. High-density industrial serial concentration on a single IP carrier slot for factory networks and multi-drop RS-485 buses. Eight independent non-isolated serial ports The Acromag IP521-64 provides eight asynchronous full-duplex RS-422B serial ports (RS-485 capable) with 64-byte transmit and receive FIFOs. OEM IP521 datasheet rates baud rates to 921.6 kbps, 1200 m typical cable length, and 16C654-family UART compatibility. High-density industrial serial concentration on a single IP carrier slot for factory networks and multi-drop RS-485 buses. Eight independent non-isolated serial ports Unique interrupt vectors per port with priority shifting



MODEL

Acromag IP521-64

CALIBRATION

Available on request

CONDITION

Used

STATUS

In stock

RFQ / SKU

IP521-64

LISTING

<https://aumictechlabs.com/products/ip521-64-2/>

NIST-traceable cal

SAM registered

30-day returns

NAICS 423690 • 811210 • 541380

This unit

The Acromag IP521-64 is an IndustryPack module that delivers eight asynchronous serial communication ports supporting RS-422 and RS-485 standards. Engineered for high-density

industrial applications, this module combines independent port configuration, high data throughput, and intelligent interrupt management to streamline multi-port serial connectivity in ruggedized environments.

Technical Specifications

Serial Communication Eight asynchronous ports per module EIA/TIA-422B and EIA-485 standards supported Maximum 921.6 kbit/s per port Typical cable length up to 1200 m (4000 feet) Non-isolated configuration with common return connection

Data Handling & Buffering 64-byte transmit FIFO and 64-byte receive FIFO per port Double-buffered or 64-byte FIFO mode selection Character size: 5 to 8 bits (software-programmable) Parity: odd, even, or none (software-programmable) Stop bits: 1, 1.5, or 2 bits (software-programmable)

Industry-standard 16C654 UART with 16C450 compatibility mode

Interrupt Control Individual control of transmit, receive, line status, data set, and flow control interrupts Unique interrupt vectors per port Priority shifting scheme prevents port blocking

Detection: receiver line status (overrun, parity, framing, break), FIFO level thresholds, character time-out, Xon/Xoff

Environmental & Reliability Operating temperature: 0 to 70 °C Storage temperature: -55 to 125 °C Relative humidity: 5 to 95% non-condensing Power: +5 V (±5%), 340 mA maximum MTBF: 3,532,745 hours at 25 °C (MIL-HDBK-217F, Notice 2)

IndustryPack Compliance ANSI/VITA-4 1995 specification compliance Access times at 8 MHz clock: ID PROM read 250 nS (0 wait state), channel register 375 nS (1 wait state), interrupt register 500 nS (2 wait states)

Key Features Failsafe receivers with open/floating input protection Line-break and false start-bit detection Socketed termination and bias resistors

Compatibility & Integration Software support packages available for VxWorks and Windows environments.

IP521 Characteristics / Specifications

PARAMETER	VALUE
Model	IP521-64
Instrument Type	Octal RS-422/485 serial communication Industry Pack module
Serial Ports	8 asynchronous full duplex RS422B supporting RS485
Maximum Data Rate	921.6 kbit/s
Maximum Cable Length Typical	1200 meters (4000 feet)
Character Size	5 to 8 bits software programmable
Parity	odd even or none software programmable
Stop Bits	1 1.5 or 2 software programmable
Fifo Depth Transmit	64 bytes
Fifo Depth Receive	64 bytes
Uart Family	16C654 with 16C450-compatible mode
Operating Temperature Standard	0 to 70 C
Operating TemperatureEModel	-40 to 85 C
Storage Temperature	-55 to 125 C
Relative Humidity	5 to 95 percent non-condensing
Power Plus 5 V	340 mA maximum
Mtbf	3532745 hours at 25 C MIL-HDBK-217F notice 2
Id Prom Read Access	0 wait state 250 ns at 8 MHz
Channel Register Access	1 wait state 375 ns at 8 MHz
Interrupt Register Access	2 wait states 500 ns at 8 MHz
Ip Standard	ANSI/VITA 4-1995
Port Isolation	non-isolated ports with common single return
Data Rate	921.6 kbit/s
Operating temperature	Standard: 0 to 70 C
Humidity	5 to 95 percent non-condensing

IP521 Specifications

PARAMETER	VALUE
Applications	High-density industrial serial concentration on a single IP carrier slot for factory networks and multi-drop RS-485 buses.
Unique interrupt vectors per port with priority shifting	Socketed termination and bias resistors
Technical Specifications	Model: IP521-64
Notes	From Acromag IP521 Octal Serial 422/485 Communication datasheet for IP521-64.

General Specifications & Supplementary Characteristics

PARAMETER	VALUE
Storage temperature	55 to 125 C
Operating temperature	Standard: 0 to 70 C
Operating Temperature	Standard: 0 to 70 C
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	340 mA maximum
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Channel Register Access	1 wait state 375 ns at 8 MHz
Interrupt Register Access	2 wait states 500 ns at 8 MHz
Ip Standard	ANSI/VITA 4-1995
Port Isolation	non-isolated ports with common single return Notes From Acromag IP521 Octal Serial 422/485 Communication datasheet for IP521-64.

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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Port Isolation	non-isolated ports with common single return
Notes	
From Acromag IP521 Octal Serial 422/485 Communication datasheet for IP521-64.	

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.