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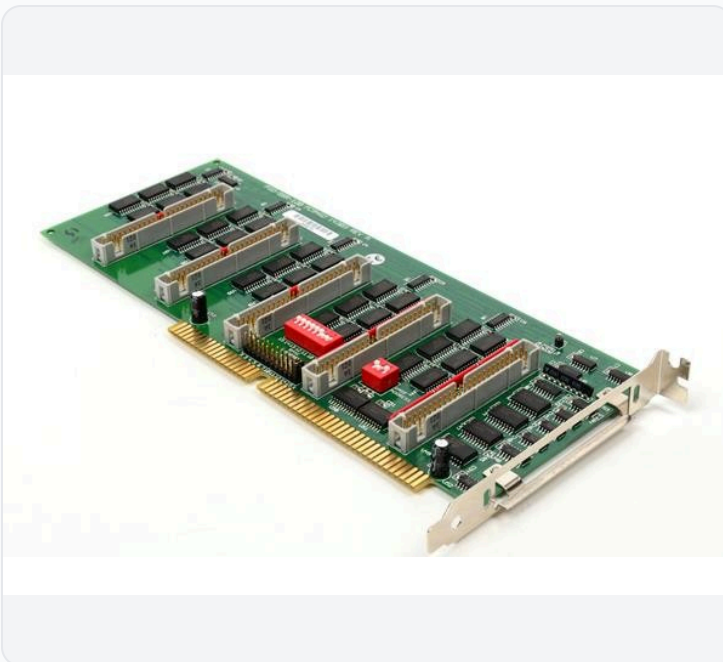
Data Sheet

August 14, 2026

KEITHLEY

Keithley PIO-SSR-120 Multi-Channel, Parallel, Digital I/O Board

Keithley Digital Input Board. Current: ** 24 mA per line, Current: ** -15 mA per line.

**MODEL****Keithley PIO-SSR-120****CALIBRATION****Available on request****CONDITION****Used****STATUS****In stock****RFQ / SKU****PIO-SSR-120****LISTING**<https://aumictechlabs.com/products/pio-ssr-120-2/>

NIST-traceable cal

SAM registered

30-day returns

NAICS 423690 · 811210 · 541380

This unit

The Keithley PIO-SSR-120 is a multi-channel parallel digital I/O board that connects computers with ISA bus slots to external devices for data acquisition and control applications. It has 120 TTL/NMOS/CMOS-compatible digital I/O lines organized across five 50-pin headers, with each header supporting 24 channels. The board can directly drive solid-state relays and, when paired with external SSRs, enables control and sensing of voltages up to 280VAC and 280VDC while delivering 4000Vrms isolation. Technical Specifications Digital I/O Lines: 120 channels Signal Compatibility: TTL/NMOS/CMOS Sink Current: 24 mA per line Source Current: -15 mA per line Output Connections: Five 50-pin headers (24 channels per header) Isolation (with external SSRs): 4000Vrms Maximum Voltage (with external SSRs): 280VAC, 280VDC Power Consumption: +5VDC @ 1.6A typical Operating Temperature: 0 to 50°C Storage Temperature: 0 to 70°C Humidity: 0 to 90% non-condensing Physical Form Factor: ISA half-slot (5in × 4.25in × 0.75in) Weight: 4oz Key Features Interrupt-capable architecture for event-driven applications Direct SSR drive capability

for high-power switching without intermediate relay logic Isolation rated to 4000Vrms when used with external solid-state relays Parallel I/O configuration for high-throughput digital signal management Low power draw from host ISA bus Typical Applications Industrial automation control and monitoring Laboratory research requiring multi-channel digital I/O Automated test equipment and ATE systems High-voltage load switching and sensing Data acquisition systems requiring isolated digital channels Compatibility & Integration Bus Interface: ISA Operating Systems: MS-DOS, Windows 95/98 Bundled Software: ExceLINX, VisualSCOPE, TestPoint, LabVIEW drivers Power Rails: +5V, ± 12 V, -5V available from ISA connector

PIOSSR120 Characteristics / Specifications

PARAMETER	VALUE
Channel Count	120 bidirectional
Channels Per Group	24
Group Count	5
Io Emulation	one 8255A Mode 0 circuit per 24-channel group
Io Signal Class	LS-TTL non-isolated
Pull Up Resistance	10 kOhm per channel
Input High Voltage Vih	2 V minimum
Input Low Voltage Vil	0.8 V maximum
Input High Current Iih	20 uA maximum at Vin 2.7 V
Input Low Current Iil	minus 0.2 mA maximum at Vin 0.4 V
Output High Voltage Voh	2.4 V minimum at Ioh minus 3 mA
Output Low Voltage Vol	0.4 V maximum at Iol 12 mA
Output High Current Ioh	minus 15 mA maximum
Output Low Current Iol	24 mA maximum
Irq Input Channels	C0 and C3 of each 24-channel group
Irq Active Transition	rising edge TTL minimum pulse 100 ns
Irq Levels	3 to 7 9 to 12 14 and 15
Base Io Address Range	any 32-byte boundary
Default Base Address	300h DIP switch selectable
External Connectors	one 50-pin Opto-22 compatible connector per 24-channel group
Operating Temperature	0 to 50 C (32 to 122 F)
Storage Temperature	0 to 70 C (32 to 158 F)
Relative Humidity	20 to 90 percent non-condensing
Power Consumption Plus 5 V	1.6 A typical
Plus 5 V From Io Connectors	1 A maximum

PARAMETER	VALUE
Board Dimensions	9 × 4.2 × 0.75 in (229 × 107 × 19 mm)
Bus Type	ISA
Compatible Baseboards	PB-24 and PB-24SM
External Ssr Isolation Class	4000 Vrms via external modules
External Ssr Voltage Class	up to 280 VAC or 280 VDC via external modules
Humidity	20 to 90 percent non-condensing

General Specifications & Supplementary Characteristics

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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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Output High Voltage Voh	2.4 V minimum at Ioh minus 3 mA
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Notes

From Keithley PIO-SSR Series user manual AppendixA digital I/O interrupt and general specifications for PIO-SSR-120. Isolation and high-voltage ratings apply only when used with external solid-state relay modules and baseboards.

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.