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Data Sheet

August 15, 2026

CURTISS-WRIGHT / PENTLAND SYSTEMS

Curtiss-Wright / Pentland Systems MPV901 Analog Input Module

32 single-ended or 16 differential multiplexer Resistor-programmed instrumentation amplifier
Direct VMEbus electrical and mechanical interface Instrumentation Amplifier: resistor
programmed on MPV901 and MPV901A Resistor-programmed instrumentation amplifier Direct
VMEbus electrical and mechanical interface Instrumentation Amplifier: resistor programmed on
MPV901 and MPV901A Analog Outputs On This Model: none (input only)



MODEL

**Curtiss-Wright /
Pentland Systems
MPV901**

CALIBRATION

**Available on
request**

CONDITION

Used

STATUS

In stock

RFQ / SKU

MPV901

LISTING

[https://aumictechlabs.c
om/products/mpv901-
2/](https://aumictechlabs.com/products/mpv901-2/)

NIST-traceable cal

SAM registered

30-day returns

NAICS 423690 · 811210 · 541380

This unit

The Curtiss-Wright / Pentland Systems MPV901 is a single-slot VMEbus analog input module for data acquisition and signal conditioning in industrial automation, aerospace, and defense systems. The module converts analog sensor signals to digital format with 12-bit resolution and routes them into VMEbus architectures. Three variants address different measurement requirements: the MPV901 provides analog input only, the MPV901A adds dual 12-bit D/A converters for closed-loop control, and the MPV901P integrates a software-programmable gain amplifier for dynamic signal scaling without hardware reconfiguration. Technical Specifications Analog Input Architecture 32-

channel single-ended or 16-channel differential multiplexer 12-bit analog-to-digital converter Sample/hold amplifier Instrumentation amplifier (resistor-programmed on MPV901/MPV901A; software-programmable on MPV901P) Analog Output (MPV901A, MPV901P only) Two 12-bit digital-to-analog converters with associated control logic Programmable Gain Amplifier (MPV901P) Dynamic gain and channel selection monitoring Optimized settling time for maximum data throughput Power Supply +5V from VMEbus P1 connector Key Features Direct VMEbus electrical and mechanical compatibility Single-slot form factor minimizes backplane footprint Flexible input configuration supports mixed single-ended and differential topologies Software-selectable gain on MPV901P eliminates manual jumper changes between measurement ranges Instrumentation amplifier topology provides high input impedance and common-mode rejection Typical Applications Data acquisition in vibration monitoring, temperature sensing, pressure transducer interfacing, and analog control loops. Aerospace test stands, defense instrumentation, and industrial process control systems benefit from the module's direct VMEbus integration and configurable channel architecture. Compatibility & Integration The MPV901 series integrates into VMEbus systems without additional interface electronics. Gain settings and channel selection are monitored in real time on the MPV901P, enabling adaptive measurement without processor intervention between acquisitions.

MPV901 Characteristics / Specifications

PARAMETER	VALUE
Model	MPV901
Instrument Type	VME analog input module
Form Factor	single slot VMEbus
Adc Resolution	12 bits
Sample Hold	yes
Multiplexer Single Ended	32 channels
Multiplexer Differential	16 channels
Instrumentation Amplifier	resistor programmed on MPV901 and MPV901A
Analog Outputs On This Model	none (input only)
Sibling Mpv901a Outputs	two 12-bit D/A converters
Sibling Mpv901p Gain	software programmable gain amplifier
Sibling Mpv901p Outputs	two 12-bit D/A converters
Pga Settling	dynamically monitored on MPV901P for maximum throughput
Bus Interface	VMEbus compatible
Manufacturer	Pentland Systems / Burr-Brown / Texas Instruments / Curtiss-Wright
Family	MPV901 MPV901A MPV901P
Input Section	multiplexer, instrumentation amplifier, sample/hold, 12-bit ADC
Mechanical Package	VME single slot
Channel Selection	analog multiplexer
Throughput Aid	PGA settling calculated on MPV901P
Related Timer Board	MPV991 VME timer/counter in the same Pentland family
Use Case	VME analog data acquisition
Documentation Source	Pentland/Curtiss-Wright MPV901 series analog I/O module literature

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 Pentland Systems / Curtiss-Wright MPV901 series product literature (12-bit ADC, 32 SE / 16 DIFF, S/H,	

resistor IA, input-only MPV901). Conversion time and analog full-scale range belong on the installed manual/nameplate; reseller pages disagree and are not used here.

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.