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Data Sheet

August 13, 2026

KONTRON / PEP

Kontron / PEP PB-DIO3 Digital I/O ModPack

The Kontron/PEP PB-DIO3 is a Digital I/O ModPack, providing a versatile solution for industrial applications requiring digital input and output capabilities. It is designed to offer reliable performance and easy integration within existing systems.

**MODEL****Kontron / PEP PB-DIO3****CALIBRATION****Available on request****CONDITION****Used****STATUS****In stock****RFQ / SKU****PB-DIO3****LISTING**<https://aumictechlabs.com/products/pb-dio3-2/>

NIST-traceable cal

SAM registered

30-day returns

NAICS 423690 • 811210 • 541380

This unit

The Kontron / PEP PB-DIO3 Digital I/O ModPack is a legacy industrial module delivering 10 opto-isolated digital input and 10 opto-isolated digital output channels. Built around the Motorola 68230 Programmable Integrated Timer, the PB-DIO3 provides reliable signal isolation and precise timing control in demanding environments. The module operates across an extended temperature range from -40°C to $+85^{\circ}\text{C}$ and integrates directly with PEP VMOD-2 and CXM-IMOD carrier boards under OS9 and VxWorks operating systems.

Technical Specifications

Digital I/O Architecture

- 10 digital output channels: 24V DC, 100 mA maximum per channel, opto-isolated, configurable common GND or Vcc
- 10 digital input channels: 24V DC, 5 mA typical, opto-isolated, common GND configuration
- 24-bit timer running at 8 MHz
- External timer input (TIN) accessible on module 2
- input and 2 output handshake lines derived from the 68230 controller

Power & Environment

- Supply: +5V DC ($\pm 5\%$), 500 mA typical
- Operating temperature: -40°C to $+85^{\circ}\text{C}$

Key Features

- Opto-isolation on all digital channels eliminates ground loop issues and protects downstream logic

from transient faults. The integrated 24-bit timer at 8 MHz enables precise timing and event sequencing without external timing circuits. Flexible output configuration (common GND or Vcc) adapts to diverse industrial control schemes. Handshake line support streamlines protocol-based I/O coordination. Typical Applications Industrial process control, factory automation, supervisory relay logic, sensor/actuator interfacing, timing-critical event logging, and legacy system modernization where OS9 or VxWorks platforms remain in service. Compatibility & Integration The PB-DIO3 mounts on PEP VMOD-2 and CXM-IMOD carrier boards and ships with driver support for both OS9 and VxWorks, ensuring straightforward integration into established control architectures.

PBDIO3 Characteristics / Specifications

PARAMETER	VALUE
Model	PB-DIO3
Manufacturer	Kontron / PEP Modular Computers
Instrument Type	Opto isolated digital I/O ModPack
Series	PB ModPack
Alias	PB DIO3; PEP PB-DIO3
Input Channels	10 opto isolated digital
Output Channels	10 opto isolated digital
Total Channels	20
Field Voltage	24 V DC
Output Current	100 mA max per output
Output Voltage	24 V
Output Common	common GND or common Vcc
Controller	Motorola MC68230 PIT
Handshake Input	2 lines
Handshake Output	2 lines
Timer	24 bit at 8 MHz
Software OS	yes
Software VxWorks	yes
Carrier VME	PEP VMOD-2 / VMOD2
Carrier CXC	IMOD / CXM-IMOD
Front Connector Class	50 pin ribbon on typical ModPack carriers
Isolation	opto isolated inputs and outputs
Not PB DIN	DIN3 is 20 channel input only
Not PB DOUT	DOUT2 is 16 DO; DOUT8 is 8 DO
Not Standalone	requires ModPack carrier

PARAMETER	VALUE
Status	legacy Kontron PEP
Form	ModPack piggyback
Family	analog digital serial counter ModPacks on same carriers
Compared PB DIO	earlier PB-DIO is 8 in / 8 out / 4 handshake at 5 V class; DIO3 is 24 V 10/10
Temperature Class	extended industrial on PEP ModPack family (confirm on the carrier and packing) Notes Specs from Kontron PB-DIO3 product page (10 in / 10 out opto, 24 V, 100 mA, common GND or Vcc, 68230 PIT, handshake, 24-bit 8 MHz timer, OS-9/VxWorks). Confirm carrier (VMOD-2 versus CXM-IMOD) and output common jumper.

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	PB-DI03
Manufacturer	Kontron / PEP Modular Computers
Instrument Type	Opto isolated digital I/O ModPack
Specifications	
PARAMETER	VALUE
Series	PB ModPack
Alias	PB DI03; PEP PB-DI03
Input Channels	10 opto isolated digital
Specifications	
PARAMETER	VALUE
Output Channels	10 opto isolated digital
Total Channels	20
Field Voltage	24 V DC
Specifications	
PARAMETER	VALUE
Output Current	100 mA max per output
Output Voltage	24 V
Output Common	common GND or common Vcc
Specifications	
PARAMETER	VALUE
Controller	Motorola MC68230 PIT
Handshake Input	2 lines
Handshake Output	2 lines

Specifications

PARAMETER	VALUE
Timer	24 bit at 8 MHz
Software OS9	yes
Software VxWorks	yes

Specifications

PARAMETER	VALUE
Carrier VME	PEP VMOD-2 / VMOD2
Carrier CXC	IMOD / CXM-IMOD
Front Connector Class	50 pin ribbon on typical ModPack carriers

Specifications

PARAMETER	VALUE
Isolation	opto isolated inputs and outputs
Not PB DIN3	DIN3 is 20 channel input only
Not PB DOUT	DOUT2 is 16 D0; DOUT8 is 8 D0

Specifications

PARAMETER	VALUE
Not Standalone	requires ModPack carrier
Status	legacy Kontron PEP
Form	ModPack piggyback

Specifications

PARAMETER	VALUE
Family	analog digital serial counter ModPacks on same carriers
Compared PB DIO	earlier PB-DIO is 8 in / 8 out / 4 handshake at 5 V class; DIO3 is 24 V 10/10
Temperature Class	extended industrial on PEP ModPack family (confirm on the carrier and packing)

Notes

Specs from Kontron PB-DIO3 product page (10 in / 10 out opto, 24 V, 100 mA, common GND or Vcc, 68230 PIT, handshake, 24-bit 8 MHz timer, OS-9/VxWorks). Confirm carrier (VMOD-2 versus CXM-IMOD) and output common jumper.

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

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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.