# ADAM-250PN 16 DI/O IP67 M12 PROFINET/Modbus/ SNMP Remote I/O Module

## **SNMP Remote I/O Module**



C E F®

### **Specifications**

#### General

**Power Consumption** 6W @ 24 V<sub>DC</sub>

Input Current Max. 12 A ±20% (X1~X4, Us) and

12 A ±20% (X5~X8, U<sub>A</sub>)

- Actuator (Encoder) Supply (24V) 0.5 A (Max. 1A) per each A-code M12

Support short-circuit protection for each A-code M12

Support Power and Ethernet 2-port Daisy Chain Connection

Support Power Reverse Polarity Protection

 Diagnostics Function DO (by channel): Over current,

Short to ground/power DI (by channel): Wire-break Encoder Supply: Over current

Power Input: Over voltage (30V), under voltage (18V), over current 12A (Us or UA)

I/O Channels 16 (Configurable DI or DO)

**Digital Input** 

Channels Max. 16 (Configurable), Sink(NPN) Type

 IEC 61131-2 Support Type 3

Input Voltage Logic level 0: 0-5 VDC Input Voltage Logic level 1: 11-30V<sub>DC</sub> Input Current Logic level 1: 2.4 mA (typical) 0.05ms/ 0.1ms/ 0.4ms/ 0.8ms/ 1.6ms/ 3.2ms/ 12.8ms/ 20ms (configurable per

each channel)

**Digital Output** 

- Filter (Input Delay)

Channels Max. 16 (Configurable), Source Type Output Current Us: 0.5 A/channel (Max. 1A)

UA: 2 A/channel (Max. 2.6A) Switching Frequency Us: 0.5A 100 Hz at rated load 48 ohm U<sub>A</sub>: 2A 40 Hz at rated load 12 ohm

 Output delay 0 to 1:

Us: 0.5A 100 us at rated load 48ohm

U<sub>A</sub>: 2A 150 us at rated load 12 ohm

Us: 0.5A 150 us at rated load 48 ohm UA: 2A 2.5 ms at rated load 12 ohm

 Load Impedance 48 ~ 4K ohm @Us 12 ~ 4K ohm @UA Support short-circuit protection for each channel

Support configurable reactions to CPU STOP (Safety Mode): Shutdown, keep last value and output substitute value 1

#### **Features**

- Offers 16-ch configurable DIO and 2-port power/ethernet daisy chain
- IEC 61131-2 type 3 sink DI and fast response source DO
- Support I/O and power diagnostic and DO safety value protection functions
- Complete LED indicator monitoring system/network/diagnostic/power status
- Enables cabinet-free front and side wall & machine mounting
- Compatible with M12 Screw lock and Push-pull fast-locking
- Rugged and IP67 design withstands strong EMI, vibration, dust, oil, and humidity atmospheres—ideal for outdoor and hazardous applications
- Built in actuator/encoder power supply from each I/O port
- Convenient printable marking label installation
- Supports multiple protocol such as PROFINET and Modbus/TCP

Ansprechpartner:

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## **Common Specifications**

#### General

 Power Input Unregulated 24 V<sub>DC</sub> ±20% Ethernet 2-port 100Base-T(X)

(with Daisy Chain and integrated switch) **Protocols** PROFINET, Modbus/TCP, TCP/IP **Watchdog Timer** System (600 ms) & Communication

**Degree of Protection** 

Connector M12, Push-pull fast connection according to

IEC 61076-2-010 or screw connection according

to IEC 61076-2-101

Area	Connector	M12 Cable Type
Ethernet	E1~E2	D-code Female 4-pin
1/0	X1~X4 (Us) X5~X8 (U <sub>A</sub> )	A-code Female 5-pin
Power Input	P1	L-code Male 5-pin
Power Output	P2	L-code Female 5-nin

**Isolation Voltage** 750 V<sub>DC</sub> between U<sub>S</sub> & U<sub>A</sub>, 1,500 V<sub>DC</sub> (Ethernet)

Wall. Machine

Mechanical tests Vibration resistance in accordance with 20g

(EN/IEC 60068-2-6) Shock in accordance with 30g

Continuous shock in accordance with 25g

(EN/IEC 60068-2-27) EN 50155 compliance (IEC 61373 body mount class B)

LLDP, MRP client, DCP, I&M data, FSU, SNMP Protocols

**Conformal Class** B (RT), 1ms I&M Data 1&M0 - I&M4 Fast Start Up (FSU) <500ms

#### **Environment**

**PROFINET** 

Mounting

**Operating Humidity** 5 ~ 95% RH (Non-condensing) **Operating Temperature**  $-40 \sim 60 \, ^{\circ}\text{C} \, (-40 \sim 140 \, ^{\circ}\text{F})$ 

Altitude

**EMC** protection ESD ±8 kV (Contact), ±15 kV (air); EFT ±2 kV;

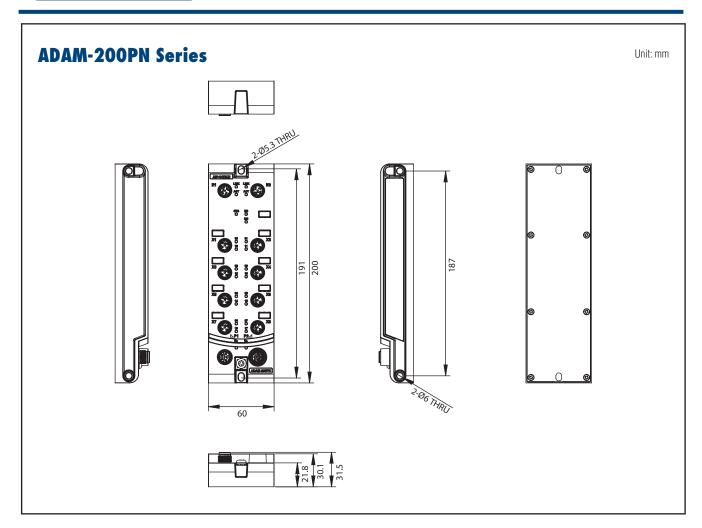
Surge ±1 kV











## **Ordering Information**

ADAM-250PN-A
1930006316-01
1930009197
16-Ch DIO M12 I/O Module
Front wall mounting screw
Side wall mounting screw

• **1990041839S000** Printable marking label (10pcs per set)



• 1655006291-01 Female M12 waterproof cover Please contact Advantech if there's more cable or accessory requirement



