



PFN-2024
PROFINET I/O Module

Features

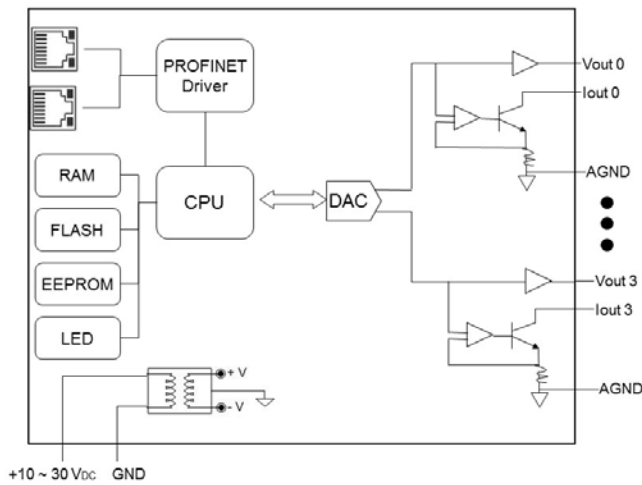
- Protocol: PROFINET IO Device
- PROFINET Conformance Class B and RT Class 1
- Cyclic Time: 1ms (min)
- Generic GSDML File Provided (Version 2.25)
- 16-bits resolution DAC
- Output Range: 0~20mA, 4~20mA, 0~10V, +/-10V, 0~5V, +/-5V
- 4 kV Contact ESD protection for any terminal
- The operating temperature range is -25°C~+70°C



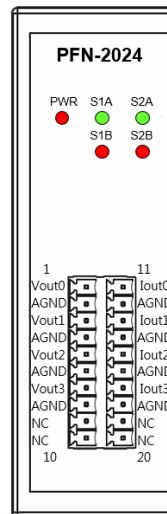
Introduction

The PFN-2024 is one of the PROFINET IO series products produced by ICP DAS. It provides the PROFINET IO communication protocol with any PROFINET IO controllers. It has 4-channel isolated analog output with voltage and current output types. It provides $\pm 4\text{kV}$ ESD protection contacting for all terminals. You can access and configure it by using the GSDML file in any PROFINET Engineering tool.

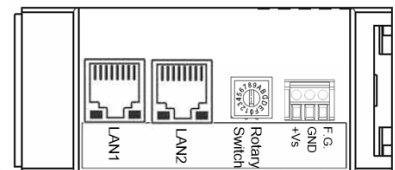
Internal I/O Structure



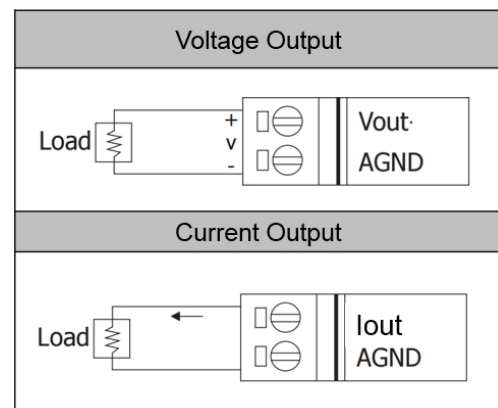
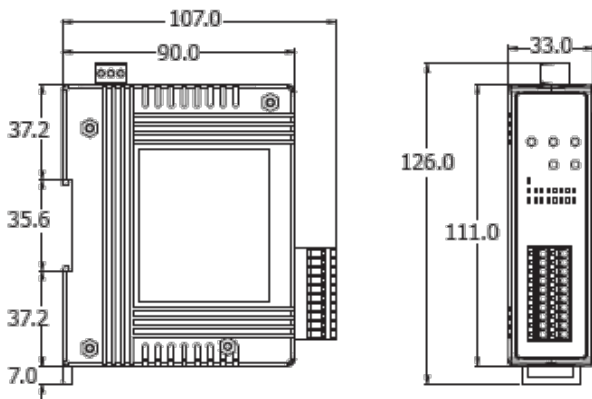
I/O Pin & Wire Connection



Terminal No.	Pin Assignment	Terminal No.	Pin Assignment
01	Vout0	11	Iout0
02	AGND	12	AGND
03	Vout1	13	Iout1
04	AGND	14	AGND
05	Vout2	15	Iout2
06	AGND	16	AGND
07	Vout3	17	Iout3
08	AGND	18	AGND
09	NC	19	NC
10	NC	20	NC



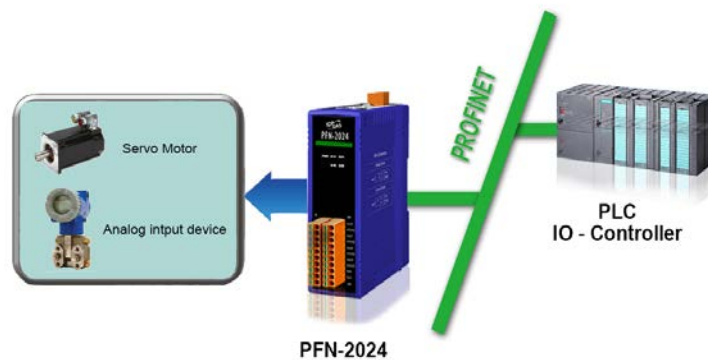
Dimensions (Units: mm)



Hardware Specifications

Hardware	
CPU	32-bit CPU Core
RAM/Flash/EEPROM	32 MB / 4 MB / 8 KB
Watchdog	CPU built-in
ESD Protection	4 kV class A
PROFINET Interface	
Protocol	PROFINET IO Device
Conformance Classes	Class B
Services	RTC, RTA, CL-RPC, DCP, LLDP, I&M
Cycle Time	1 ms (min)
Ethernet Interface	
Controller	10/100Base-TX Ethernet Controller (Auto-negotiating, Auto_MDIX)
Connector	RJ-45 x 2 (LED indicators) , Integrated 2-Port Switch
Services	ICMP, IGMP, ARP, DHCP, TELNET, TFTP, SNMP, VLAN Priority Tagging
Analog Output	
Channels	4
Output Range	0~20mA, 4~20mA (current sourcing) 0~10V, +/-10V, 0~5V, +/-5V
Resolution	16 bit
Accuracy	+/- 0.1% of FSR
Isolation	1500 VDC
LED	
Round LED	PWR LED, S1A LED, S1B LED, S2A LED, S2B LED
Power	
Power supply	Unregulated +10 ~ +30 VDC
Protection	Power reverse polarity protection, Over-voltage brown-out protection
Power Consumption	7W
Mechanism	
Installation	DIN-Rail
Dimensions	33 mm x 107 mm x 126 mm (W x L x H)
Environment	
Operating Temp.	-25 ~ 70 °C
Storage Temp.	-30 ~ 80 °C
Humidity	10 ~ 90% RH, non-condensing

Application



Ordering Information

PFN-2024 CR	PROFINET I/O Module (4-channel Isolated Analog Output Module) (RoHS)
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