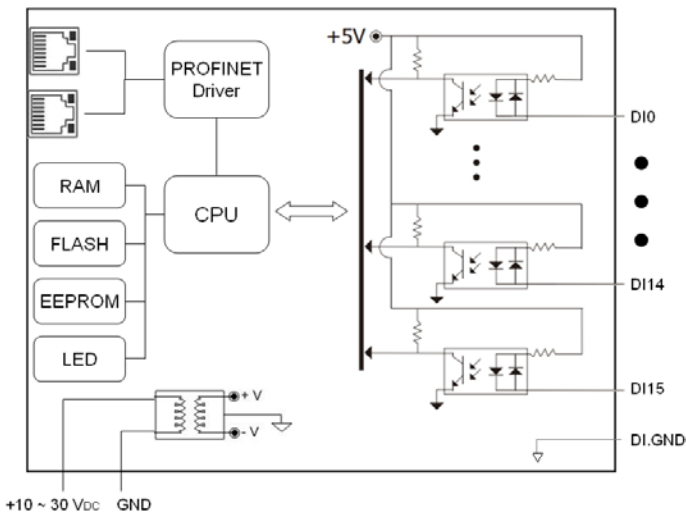# PFN-2053
PROFINET I/O Module

Features

- Protocol: PROFINET IO Device
- PROFINET Conformance Class B and RT Class 1
- Cyclic Time: 1ms (min)
- Generic GSDML File Provided (Version 2.25)
- 4 kV Contact ESD protection for any terminal
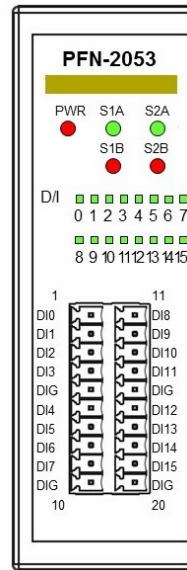- The operating temperature range is -25°C~+75°C

Introduction

The PFN-2053 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 16-channel dry contact non-isolated digital inputs, and it provides ±4kV ESD protection contacting for all terminals. You can access and configure it by using the GSDML file in any PROFINET Engineering tool.

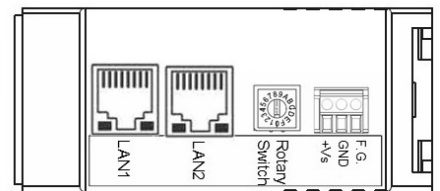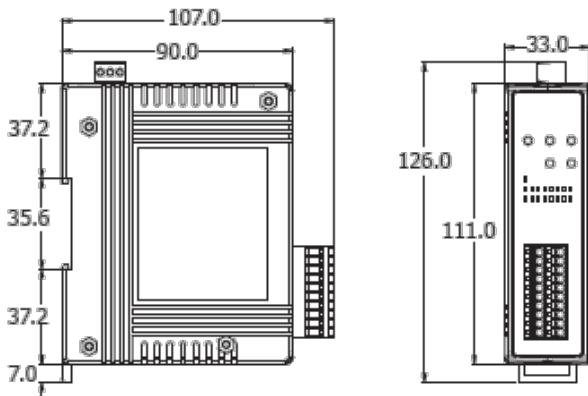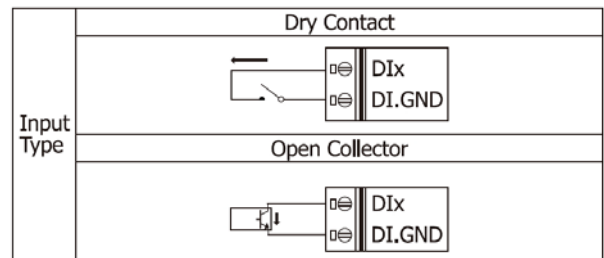## Internal I/O Structure

I/O Pin & Wire Connection

Terminal No.	Pin Assignment	Terminal No.	Pin Assignment
01	DI0	11	DI8
02	DI1	12	DI9
03	DI2	13	DI10
04	DI3	14	DI11
05	DI GND	15	DI GND
06	DI4	16	DI12
07	DI5	17	DI13
08	DI6	18	DI14
09	DI7	19	DI15
10	DI GND	20	DI GND

Wire Connection

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
Digital Input	
Channels	16, Dry Contact: Source,
Dry Contact Level	Off Voltage Level : Open, On Voltage Level : Close to GND
LED	
Round LED	PWR LED, S1A LED, S1B LED, S2A LED, S2B LED
Power	
Power supply	Unregulated +10 ~ +30 V_{DC}
Protection	Power reverse polarity protection, Over-voltage brown-out protection
Power Consumption	4 W
Mechanism	
Installation	DIN-Rail
Dimensions	33 mm x 107 mm x 126 mm (W x L x H)
Environment	
Operating Temp.	-25 ~ 75 ℃
Storage Temp.	-30 ~ 80 ℃
Humidity	10 ~ 90% RH, non-condensing

■ Application

■ Ordering Information

PFN-2053 CR	PROFINET I/O Module (Dry contact Non-Isolated 16-ch DI) (RoHS)