



PROFIBUS Remote I/O Module

#### **Features**

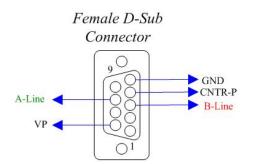
- Support for PROFIBUS DP-V0 protocol
- Detect transmission rate automatically (12Mbps)
- Address 0~99 set by rotary switches
- Network Isolation Protection
- 3000V<sub>DC</sub> isolation protection on PROFIBUS side
- 4KVESD protection (contact for any terminal)
- Wide range of power input (DC 10~40V<sub>DC</sub>) and operating temperature (-25°C~+75°C)



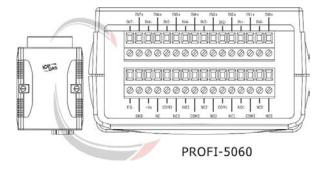
### Introduction

Pin Assignments

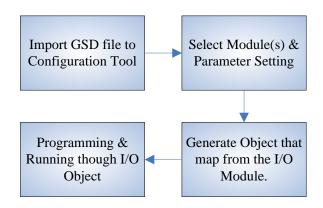
The PROFI-5060 is one of the PROFIBUS DP series products produced by ICP DAS. It provides the PROFIBUS DP communication protocol with any DP-Masters. The PROFI-5060 provides ±4KV ESD protection contacting for all terminals (include I/O Terminals and PROFIBUS connector). By applying the PROFI-5060, users can easily establish a PROFIBUS DP network with other DP-Masters. In advance, it can be used in the application of building automation, remote data acquisition, environment control and monitoring, laboratory equipment & research, factory automation, etc...



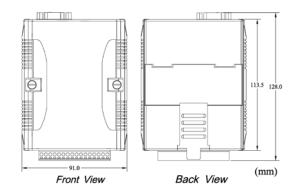
Pin No.	Signal	e Receive/Transmit data - plus	
3	B-Line		
4	CNTR-P		
5	GND	Power ground of active terminator	
6	VP	Power 5 volt of active terminator	
8 A-Line		Receive/Transmit data - minus	



# Design Flowchart



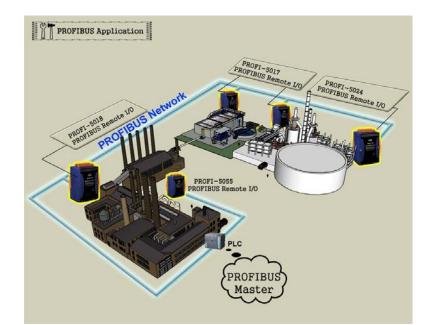
## Dimensions (Units: mm)



# Specifications

Hardware				
ESD Protection	4 kV class A			
PROFIBUS Interface				
Controller	Profichip VPCLS2			
Transceiver	ADI ADM2486			
Connector	9-pin female D-Sub			
Baud Rate (bps)	9.6 k, 19.2 k, 45.45 k, 93.75 k, 187.5 k, 500 k, 1.5 M, 3 M, 6 M, 12 M			
Transmission Distance (m)	Depend on baud rate (for example, max. 1200 m at 9.6 kbps )			
Isolation	3000 V <sub>DC</sub> for DC-to-DC, 2500 Vrms for bus-to-logic			
Protocol	DP-V0			
LED				
Round LED	PWR LED, RUN LED			
Power				
Power supply	Unregulated +10 $\sim$ +40 V <sub>DC</sub>			
Protection	Reverse polarity protection, Over-voltage brown-out protection			
Power Consumption	1 W			
1/0				
Digital Output	4 Channels (Form C) Contact Rating: 0.6A@125V <sub>AC</sub> , 2A@30V <sub>DC</sub> Operating Time: 3ms. Release Time: 2ms. (Typical) Minimum Life: 500,000 Ops.			
Digital Input	8 Channels (Sink or Source), Isolated from each other Off Voltage Level: +1V Max. On Voltage Level: +4 ~ +30V Input Impedance: $3K\Omega$ in series with opto-coupler Isolation Voltage: $3750Vrms$			
Mechanism				
Installation	DIN-Rail			
Dimensions	91 mm x 128 mm x 52 mm (W x L x H)			
Environment				
Operating Temp.	-25 ~ 75°C			
Storage Temp.	-30 ~ 80°C			
Humidity	10~90% RH,non-condens			

## **Application**



#### Ordering Information

PRO	EL-5	060	CR
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PROFIBUS Remote I/O Module (8-channel Isolated Digital Input and 4-channel Relay Output)