



PROFI-5060 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_{DC} isolation protection on PROFIBUS side
- 4KVESD protection (contact for any terminal)
- Wide range of power input (DC $10 \sim 40V_{DC}$) and operating temperature (-25°C~+75°C)



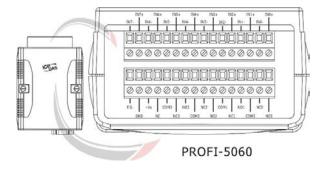
Design Flowchart

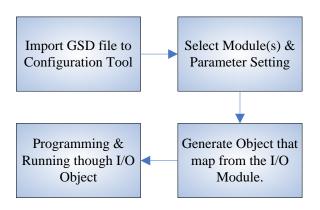
Introduction

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...

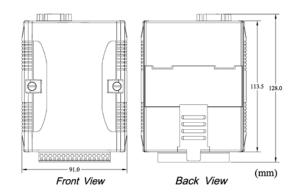
Female D-Sub Connector 0 GND CNTR-P A-Line B-Line VP \cap

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





Dimensions (Units: mm)



Pin Assignments

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 _{DC} 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 _{DC}		
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 _{AC} , 2A@30V _{DC} 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℃		
Storage Temp.	-30 ~ 80°C		
Humidity	10~90% RH,non-condens		

Application



Ordering Information

PROFI-5060 CR	PROFIBUS Remote I/O Module (8-channel Isolated Digital Input and 4-channel Relay Output)