



PROFIBUS Remote I/O Module

Features

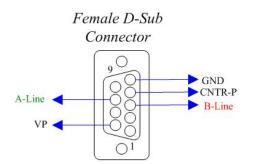
- Support for PROFIBUS DP-V0 protocol
- Detect transmission rate automatically (12Mbps)
- Address 0~99 set by rotary switches
- Network Isolation Protection
- 3000V_{DC} isolation protection on PROFIBUS side
- 4KVESD protection (contact for any terminal)
- Wide range of power input (DC 10~40V_{DC}) and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



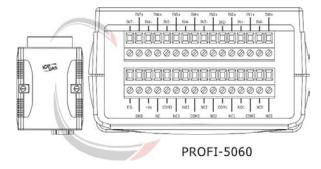
Introduction

Pin Assignments

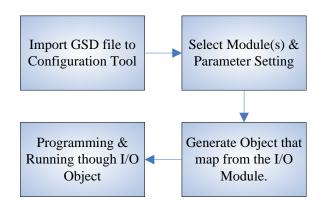
The PROFI-5060 is one of the PROFIBUS DP series products produced by ICP DAS. It provides the PROFIBUS DP communication protocol with any DP-Masters. The PROFI-5060 provides ±4KV ESD protection contacting for all terminals (include I/O Terminals and PROFIBUS connector). By applying the PROFI-5060, users 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...



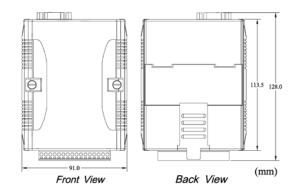
| Pin No. | Signal | e Receive/Transmit data - plus | |
|----------|--------|-----------------------------------|--|
| 3 | B-Line | | |
| 4 | CNTR-P | | |
| 5 | GND | Power ground of active terminator | |
| 6 | VP | Power 5 volt of active terminator | |
| 8 A-Line | | Receive/Transmit data - minus |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



Design Flowchart



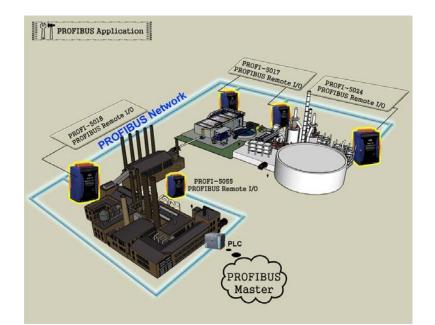
Dimensions (Units: mm)



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 _{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°C | | | |
| Storage Temp. | -30 ~ 80°C | | | |
| Humidity | 10~90% RH,non-condens | | | |

Application



Ordering Information

| PRO | EL-5 | 060 | CR |
|-----|------|-----|----|
| | | | • |

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