

PROFI-8455

PROFIBUS Remote I/O Unit with 4 Expansion Slots

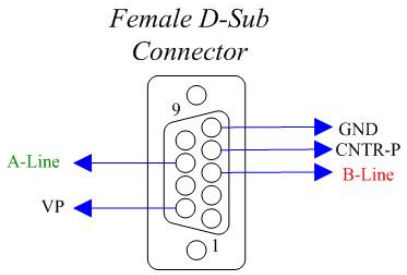
Features

- Protocol& hierarchy: DP-V0 Slave
- Detect transmission rate (9.6 ~ 12000 kbps) automatically
- Support all I-8k & I-87k I/O Module.
- Support Device-Related & Channel-Related Diagnosis
- Address 0~126 set by rotary switches or SSA-Telegram.
- Support Hot-Swap for I-87k High-Profile Modules.
- Network Isolation Protection
- 3000 V_{DC} isolation protection on PROFIBUS side
- 4 kVESD Protection (contacting for any terminal).

Introduction

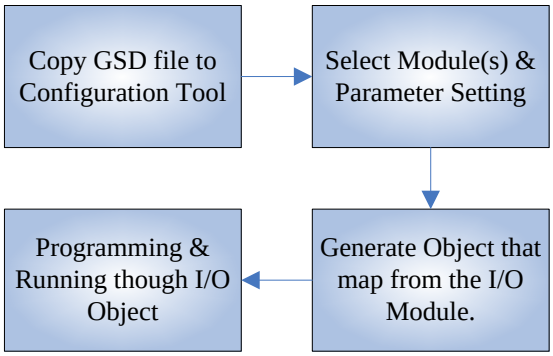
The PROFI-8455 Remote I/O Unit is specially designed for the slave device of PROFIBUS DP protocol. It supports up to 4 slots for ICPDAS I-8k series, I-87k Low Profile series, and I-87k High Profiles series I/O modules. In addition, we also provide hot-swap function for I-87k High Profiles series I/O modules. To setup network, users can choose and configure I/O modules by using the GSD file without any other setting tools.

Pin Assignments



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

Design Flowchart

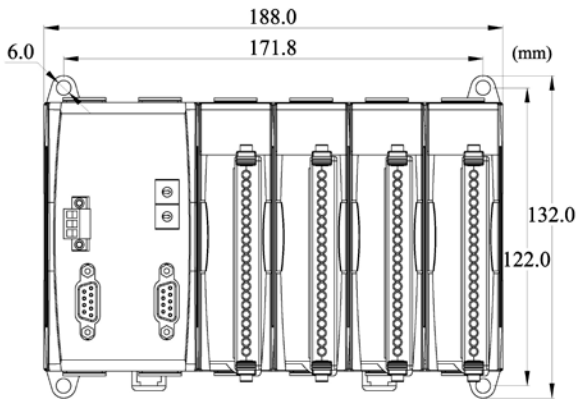


Hot Swap & Auto-configuration

- **Diagnostic message report when module pulls.**
- **Auto-Reconfiguration issue when module plugs.**



Dimensions (Units: mm)

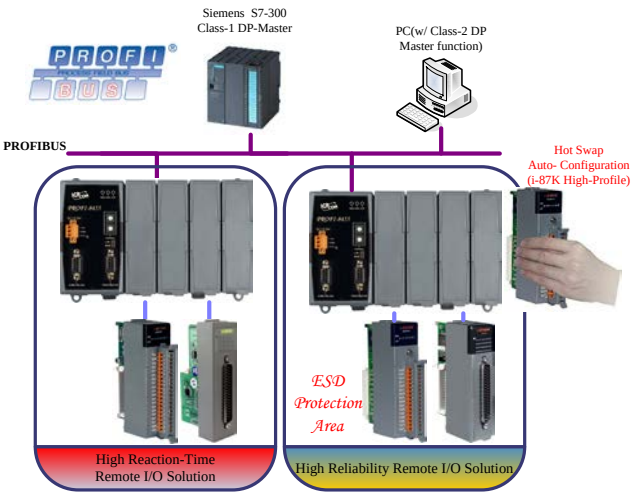


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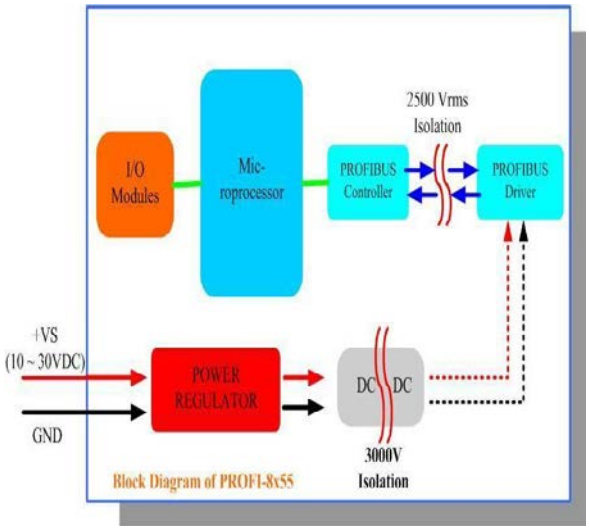
Specifications

Hardware	
CPU	80186, 80 MHz or compatible
SRAM/Flash/EEPROM	512 KB / 512 KB / 2 KB
Watchdog	Watchdog IC CPU built-in
Expansion Slot	4 slots
ESD Protection	4 kV class A
PROFIBUS Interface	
Controller	Siemens SPC3
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
UART Interface	
COM	RS-232 (For updating firmware)
LED	
Round LED	PWR LED, RUN LED, ERR LED
Power	
Power supply	Unregulated +10 ~ +30 V_{DC}
Protection	Power reverse polarity protection, Over-voltage brown-out protection
Power Consumption	5 W
Mechanism	
Installation	DIN-Rail or Wall Mounting
Dimensions	188 mm x 91 mm x 132 mm (W x L x H)
Environment	
Operating Temp.	-25 ~ 75 ℃
Storage Temp.	-40 ~ 80 ℃
Humidity	5 ~ 95% RH, non-condensing

Application



Diagram



Ordering Information

PROFI-8455	PROFIBUS Remote I/O Unit with 4 Expansion Slots
PROFI-8455 CR	PROFIBUS Remote I/O Unit with 4 Expansion Slots(RoHS)

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