PROFIBUS Series Products

PROFIBUS to RS-232/422/485 Converter

RoHS CE FC

I-7550

Dimensions

Back View   *Front View*   (mm)
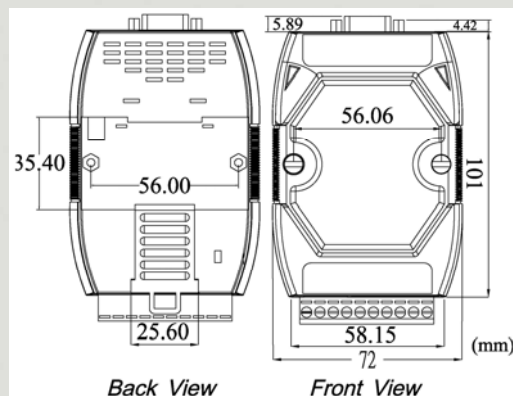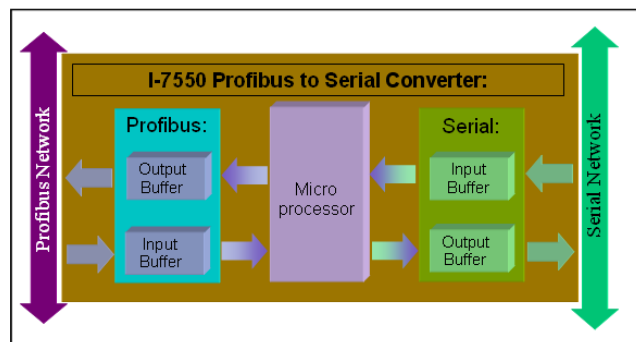
The I-7550 converter is specially designed for the slave device of PROFIBUS DP protocol. It offers RS-232, RS-422, and RS-485 three kinds of communication way. With the Hybrid COM 1 design, users can readily choose one type of com port to use. By using this module, users can put their RS-232/422/485 devices into PROFIBUS network very easily.
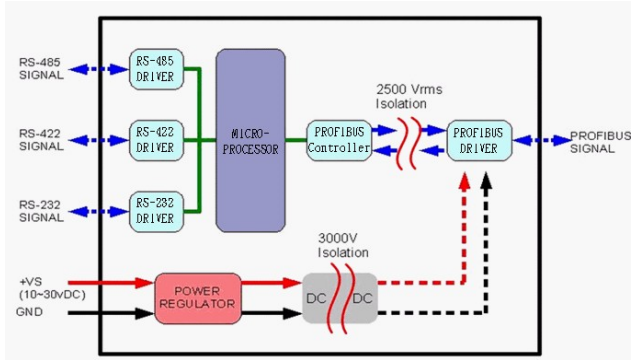
Features

- Protocol & Hierarchy: DP-V0 Slave
- Detect transmission rate (9.6 ~ 12000 kbps) automatically
- Max length of in/output data is 128 Bytes
- Address 0~126 set by DIP switch or EEPROM
- Support several kinds of baud rate for COM1 from 1.2 to 115.2 kbps
- Built-in self-tuner ASIC controller on RS-422/485 port
- Network Isolation Protection: High Speed iCoupler
- 3000 V_{DC} isolation protection on PROFIBUS side
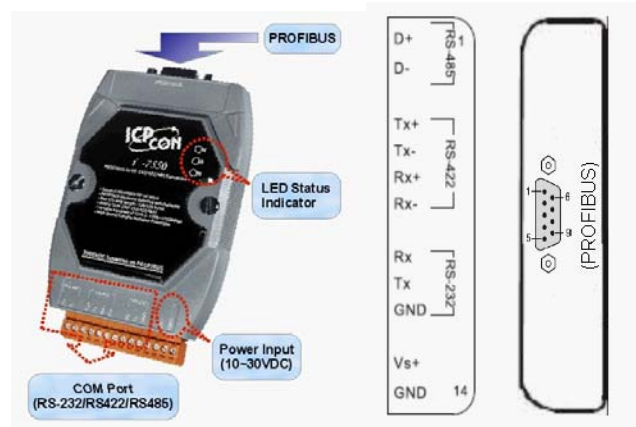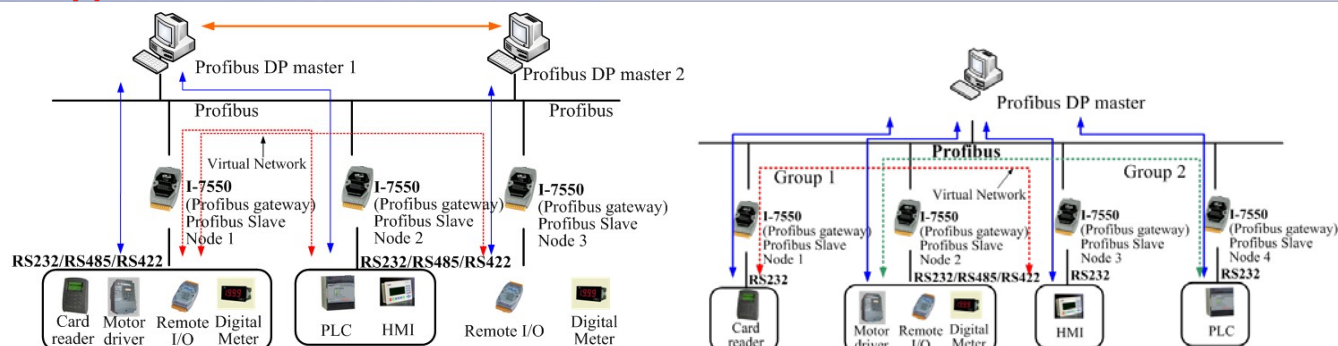- 4 kV ESD Protection
- Mountable on DIN-Rail

Data Flow

Pin Assignments

Block Diagram

ICP DAS Professional Provider of High Quality Industrial Data Acquisition and Control Products http://www.icpdas.com

Hardware Specifications

Hardware	
CPU	80186, 80 MHz or compatible
SRAM/Flash/EEPROM	512 KB / 512 KB / 16 KB
Watchdog	Watchdog IC CPU built-in
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/RS-422/RS-485(can't be used simultaneously)
COM Connector	3-pin screwed terminal block (RxD, TxD, GND) 4-pin screwed terminal block (RxD+, RxD-, TxD+, TxD-) 2-pin screwed terminal block (DATA+, DATA-)
Baud Rate (bps)	1200, 2400, 4800, 9600, 19200, 38400, 57600, 115200
Data bit	7, 8
Stop bit	1
Parity	None, Even, Odd
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	2.5 W
Mechanism	
Installation	DIN-Rail
Dimensions	72 mm x 33 mm x 119 mm (W x L x H)
Environment	
Operating Temp.	-25 ~ 75℃
Storage Temp.	-30 ~ 85℃
Humidity	5 ~ 95% RH, non-condensing

Applications

Ordering Information

I-7550-G	PROFIBUS to RS-232/422/485 Converter
I-7550-G CR	PROFIBUS to RS-232/422/485 Converter (RoHS)