

PROFIBUS Series Products

PROFIBUS to 4-ch HART Gateway

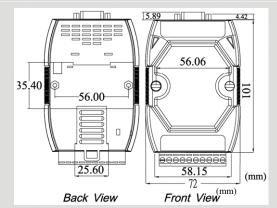








GW-7557



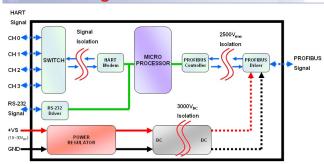
Dimensions

The GW-7557 Gateway is specially designed for the slave device of PROFIBUS DP protocol. It allows the PROFIBUS master to access the HART slave devices. These HART slave devices may be a transmitter, an actuator, a current output device and so forth. In addition, we also provide the utility software for users to configure the GW-7557. By using this module, users can put their HART slave devices into PROFIBUS network very easily.

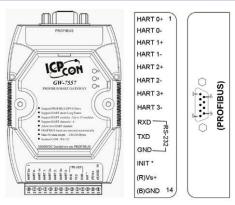
Features

- Protocol & Hierarchy: DP-V0 Slave
- Detect transmission rate (9.6 ~ 12000 kbps) automatically
- Max transmission speed up to 12 Mbps for PROFIBUS and 115.2 kbps for COM Port
- Max I/O Data Length: 240/240 Bytes
- Support 4 HART Channels
- Support HART Short/Long frame
- Support HART Burst mode
- Allow two HART Masters
- Working in point-to-point or multi-drop HART mode
- Connecting up to 15 HART modules
- Network Isolation Protection: High Speed iCoupler
- 3000 V_{DC} isolation protection on PROFIBUS side
- 4 kV ESD Protection

Block Diagram



Pin Assignments



Utility Features

- Read/Write module configuration of the
- Provide auto-scan function for HART communication parameters
- Provide test function for HART slave devices
- Show PROFIBUS user parameters of the GW-7557

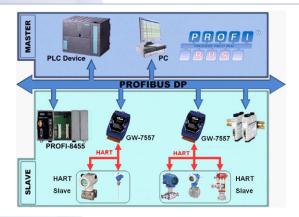




Hardware Specifications

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	Profichip VPC3+C
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
HART Interface	
HART Interface	8-pin screwed terminal block
HART Channel	4 channels
UART Interface	
COM	RS-232 (For updating firmware and configuration)
COM Connector	3-pin screwed terminal block (TxD, RxD, GND)
Baud Rate (bps)	Up to 115200
Data bit	7,8
Stop bit	1, 2
Parity	None, Even, Odd
LED	
Round LED	PWR LED, RUN LED, ERR LED
Power	
Power supply	Unregulated $+10 \sim +30 \text{ V}_{DC}$
Protection	Power reverse polarity protection, Over-voltage brown-out protection
Power Consumption	2.0 W
Mechanism	
Installation	DIN-Rail
Dimensions	72mm x 33mm x 119mm (W x L x H)
Environment	
Operating Temp.	-25 ~ 75 ℃
Storage Temp.	-30 ~ 85°C
Humidity	5 ~ 95% RH, non-condensing

Applications



Ordering Information

GW-7557-B CR PROFIBUS/HART Gateway