ICP
Electronics Australia

GW-7557-B GW-7557-M
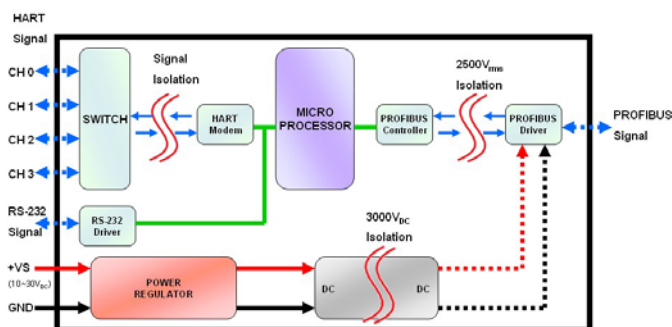PROFIBUS to 4-ch HART Gateway

☐ Features

- Protocol & Hierarchy: DP-V0 Slave
- 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
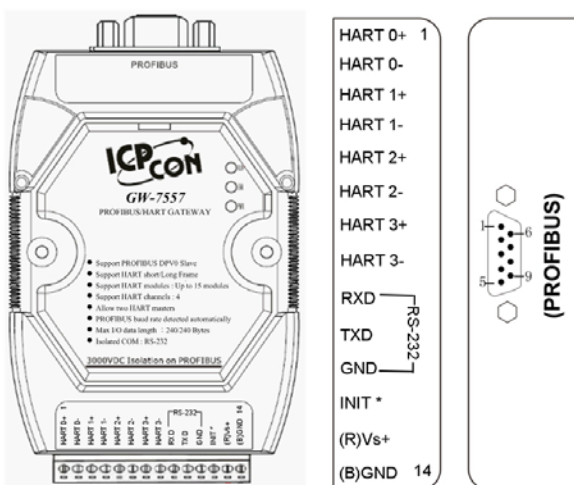- Connecting up to 15 HART modules

CE FC RoHS

☐ Introduction

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.
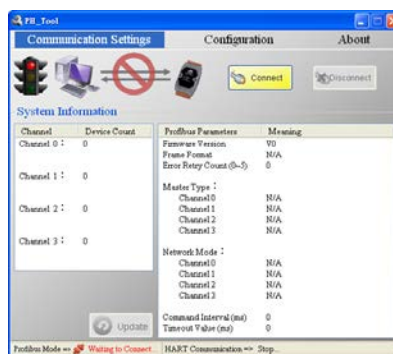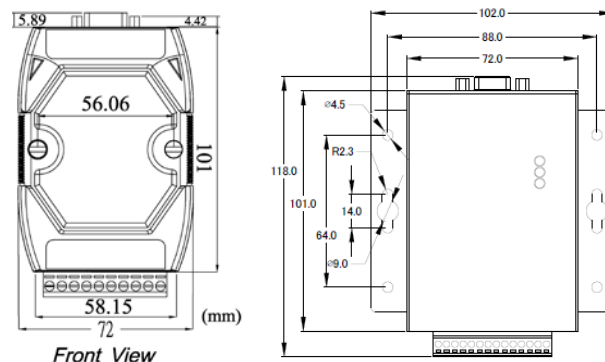
☐ Block Diagram

☐ Utility

- 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

☐ Pin Assignments

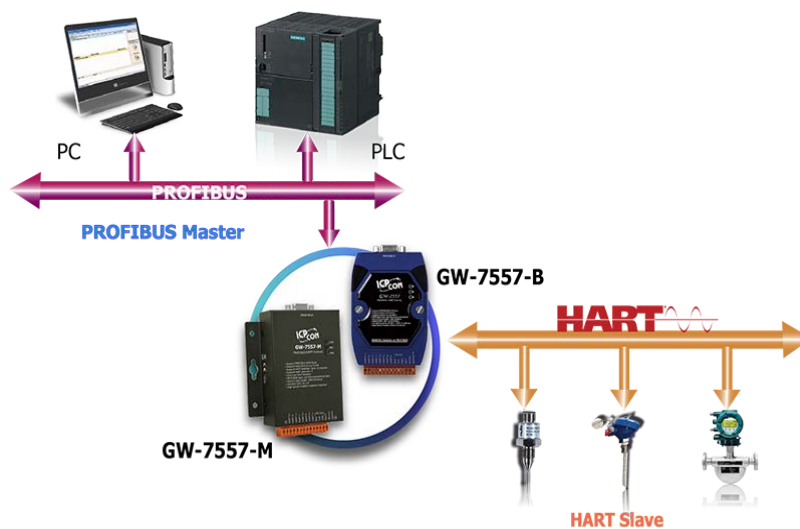|	
HART 0+	1
HART 0-	
HART 1+	
HART 1-	
HART 2+	
HART 2-	
HART 3+	
HART 3-	
RXD	
TXD	RS-232
GND	
INIT *	
(R)Vs+	
(B)GND	14

☐ Dimensions (Units: mm)

Front View

■ 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 ~ +30 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℃
Humidity	5 ~ 95% RH, non-condensing

■ Application

■ Ordering Information

GW-7557-B CR	PROFIBUS/HART Gateway (RoHS)
GW-7557-M CR	PROFIBUS/HART Gateway (RoHS) with Metal casing