PROFIBUS™ Slave Base Controller

PROFIBUS™ Slave Base Controller
H2-PBC

Specifications	
Module Location	CPU slot of any DL205 base
Module Type	CPU device
Maximum Expansion	126 stations, 32 stations per segment, 9 repeaters in a row
Communications	RS-485 PROFIBUS, PROFIBUS-DP. Baud rate selectable from 9.6 Kbaud to 12 Mbaud.
Module Connectors	PROFIBUS 9-pin D-shell, RJ-12 serial (for configuration only*)
Internal Power Consumption	530 mA maximum at 5VDC (supplied by base power supply)
Operating Environment	0ºC to 60ºC (32ºF to 140ºF), 5% to 95% humidity (non-condensing)
Manufacturer	Host Automation Products, L.L.C.

* The serial port is used only for configuration of the H2-PBC firmware.

Overview

If you are using a PROFIBUS™ controller network, the DL205 I/O sub-system can help reduce the cost of your overall application. The H2-PBC module allows the micro-modular DL205 I/O sub-system to be linked with a PROFIBUS master controller. PROFIBUS is a control bus that provides a common method to connect automation equipment with devices on a single network and significantly reduces hardwiring costs. PROFIBUS provides specifications for information exchanged between nodes, such as controller data associated with low level device and configuration parameters that are individually related to system operations.

How it works

The H2-PBC module is a PROFIBUS slave, which can be plugged into the CPU slot of the DL205 micro-modular family of I/O bases. The module reports all identification data, diagnostic information, and parameters that control the module operation. The H2-PBC module scans and reports all discrete and analog I/O data to a PROFIBUS Master. The AC externally-powered DL205 I/O base units contain a 24 VDC, 0.3A power supply for simple wiring of sensors and actuators into the DL205 I/O modules, and for controlling them with a PROFIBUS Master. Using our Profibus I/O sub-system will increase installation flexibility and save on wiring costs. The H2-PBC module supports all DL205 discrete and analog I/O modules and the H2-CTRIO module.

The PROFIBUS Slave Base Controller also offers the following:

- **Cost-effectiveness:** Hardwiring cost is reduced with a single network for devices.
- **Easy connectivity**: Low-cost installation is easy to implement and maintain.
- **Diagnostics**: Advanced error diagnostics not commonly available in traditional systems are supported.
- **High baud rates**: Baud rates bring response time down to 10ms per device.
- **LED indicators**: Provide quick indication of DL205 power and operating mode.

Please Note:

1. The PROFIBUS Slave Base Controller module H2-PBC is a PTO-certified PROFIBUS-compliant slave I/O interface product.
   See www.profibus.com for more information.

2 For use with Think & Do Software, we recommend the SST PROFIBUS PCI Master Card, part number 5136-PFB-PCI. (AutomationDirect does not provide this interface).
   See www.mysst.com for more information.

Connect our micro-modular DL205 I/O…

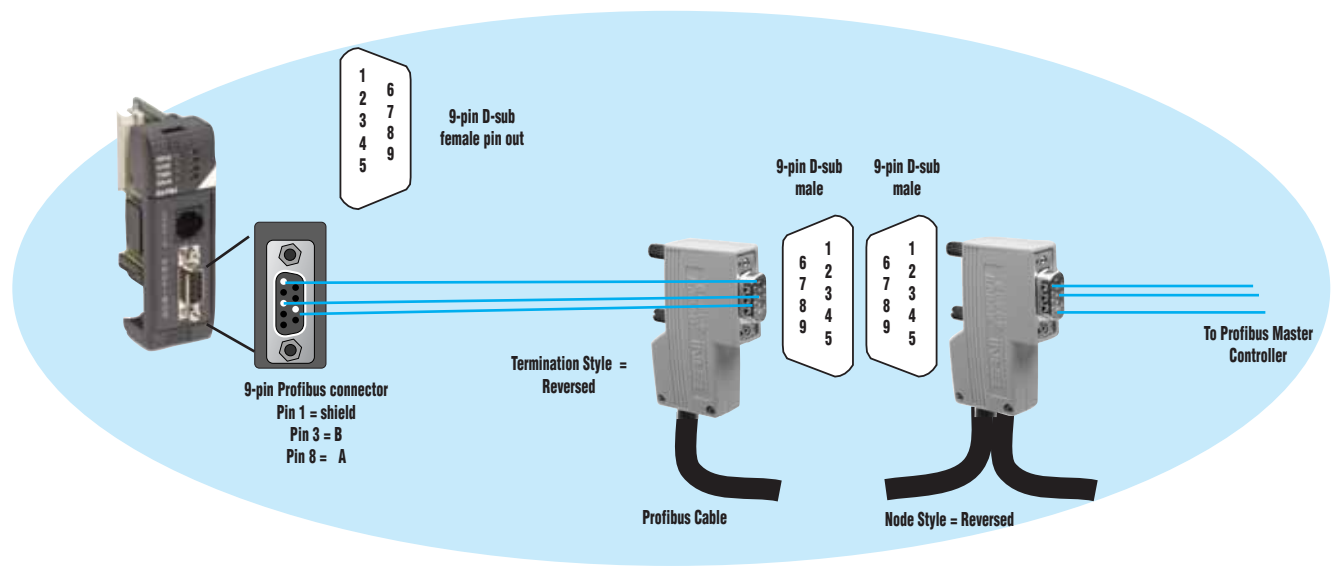**H2-PBC slave**   **H2-PBC slave**
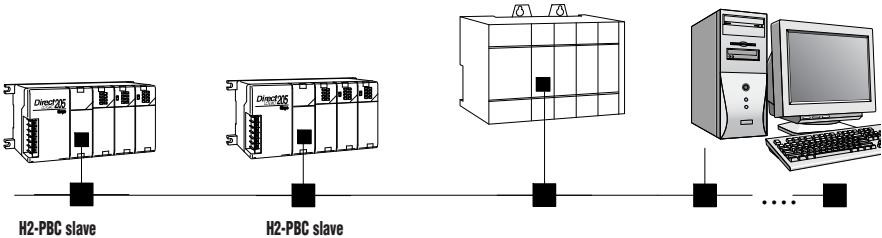
...with your PLC or PC-based PROFIBUS Master.

The D2-INST-M Installation and PLC I/O User Manual covers information about DL205 I/O modules, power budgeting, and installation and wiring. This catalog does not cover CPU-slot controllers.

PROFIBUS Slave Base Controller

Baud	Max. Segment Length		Max. Expansion	
	Feet	*Meters*	*Feet*	*Meters*
9.6 Kbps	3278	1,000	3,2786	1,0000
19.2 Kbps	3278	1,000	3,2786	1,0000
93.75 Kbps	3278	1,000	3,2786	1,0000
187.5 Kbps	3278	1,000	3,2786	1,0000
500 Kbps	1311	400	1,3114	4,000
1.5 Mbps	655	200	6,557	2,000
3 Mbps	327	100	3,270	1,000
6 Mbps	327	100	3,270	1,000
12 Mbps	327	100	3,270	1,000

Recommended Cables	
Siemens	6XV1 830 0AH10
Belden	3079A

9-pin D-sub
female pin out

9-pin D-sub
male

9-pin D-sub
male

To Profibus Master
Controller

9-pin Profibus connector
Pin 1 = shield
Pin 3 = B
Pin 8 = A

Termination Style =
Reversed

Profibus Cable

Node Style = Reversed

ERNI ER*bic* connectors for Profibus networks

ERNI ER*bic* connectors are available for the Profibus Base Controller. They are available in node and termination reversed styles for DL205 and PC connections, horizontal or vertical cable entry, and termination or daisy-chain configurations.

ERNI ER*bic* connectors		
Part No.	*Description*	*Device*
104577	Profibus-certified reverse node horizontal connector. 9-pin Male D-Sub	H2-PBC or any Profibus ISA/PCI Personal Computer Master/Slave Card
104322	Profibus-certified reversed termination horizontal connector. 9-pin Male D-Sub	H2-PBC or any Profibus ISA/PCI Personal Computer Master/Slave Card

Horizontal entry cable

Vertical entry cable

Note: Dimensions are in millimeters.

Contact A

Contact B

Shield tied bar

Contact A

Contact B
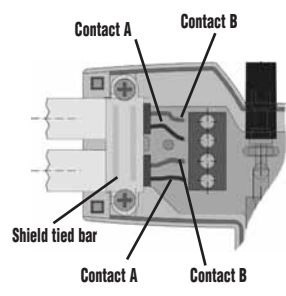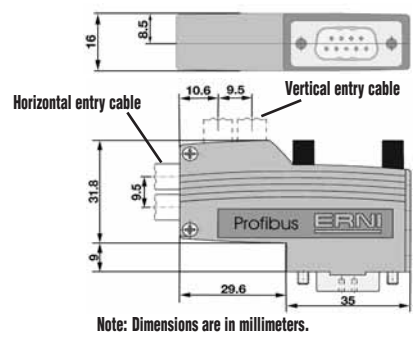
PLC Overview

DL05/06 PLC

DL105 PLC

DL205 PLC

DL305 PLC

DL405 PLC

Field I/O

Software

C-more HMIs

Other HMI

AC Drives

Motors

Steppers/ Servos

Motor Controls

Proximity Sensors

Photo Sensors

Limit Switches

Encoders

Current Sensors

Pushbuttons/ Lights

Process

Relays/ Timers

Comm.

TB's & Wiring

Power

Circuit Protection

Enclosures

Appendix

Part Index