

# Serial Module for WinPLC and EBC Systems

## Serial Communications Module for WinPLCs & EBCs

H2-SERIO <--->



### Serial I/O module for WinPLCs

Add serial ports to your WinPLC system by simply plugging the H2-SERIO modules into the DL205 I/O base. This serial module is used exclusively with the WinPLC. The WinPLC communicates with the H2-SERIO module across the DL205 backplane.

### Up to ten serial ports on a WinPLC system

The WinPLC has one built-in serial port. You can add as many as nine additional serial ports for Think & Do Studio or Think & Do Live! applications requiring multiple serial devices, such as barcode scanners. Connect to just about any serial device that communicates ASCII protocol. The H2-SERIO can also serve as a Modbus RTU slave.

### Processing large amounts of serial data with a WinPLC

While the H2-SERIO module will support virtually any serial device, processing large amounts of serial data will increase the system response time. This is important to consider when using multiple H2-SERIO modules, especially in a WinPLC local base with an H2-ERM or H2-CTRIO.

### H2-SERIO Specifications

<b>Module Type</b>	Intelligent module for use with H2-WPLC** or PC/EBC system
<b># of Serial Ports per Module</b>	3
<b># of modules supported per WinPLC</b>	3
<b># of modules supported per EBC node</b>	3
<b>Protocols Supported</b>	Serial ASCII and Modbus RTU slave
<b>Connector</b>	RJ12 jack
<b>Power Consumption</b>	210 mA @ 5 VDC
<b>Operating Environment</b>	0 to 60°C (32°F to 140°F), 5% to 95% RH (non-condensing)
<b>Manufacturer</b>	Host Automation Products, L.L.C.

### Separate communications parameters for each port

Use Think & Do software packages to set baud rate, parity, data bits, and stop bits for each serial port. Choose from 300 baud to 57.6K baud communication speeds. Think & Do Studio or Think & Do Live! allows each port to be designated as a Modbus slave or a generic serial device. Each port on the H2-SERIO module is capable of full hardware handshaking.

### Easy serial communications

All Think & Do PC control software products include advanced string and array functions that make transmitting, receiving and manipulating serial data a snap.

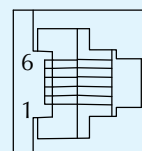
### Using H2-SERIO in a PC-based control EBC system

Think & Do Studio version 6.5 supports the use of up to three H2-SERIO modules per EBC node in a PC-based control system. The master must be a PC running Studio 6.5 or later. This does not apply to a WinPLC system with an ERM module used for remote I/O.

The Think & Do features listed on this page for the WinPLC (receiving and manipulating data) also apply to a PC running the Think & Do software.

### Pin Assignments for H2-SERIO ports

- |   |     |                            |
|---|-----|----------------------------|
| 1 | 0V  | Power (-) Connection (GND) |
| 2 | CTS | Clear to Send              |
| 3 | RXD | Receive Data (RS-232)      |
| 4 | TXD | Transmit Data (RS-232)     |
| 5 | RTS | Request to Send            |
| 6 | 0V  | Signal Ground (GND)        |



RJ12 (6P6C) Female Modular Connector

# Power Requirements

## These charts help determine your power requirements

This section shows the amount of power supplied by each of the base power supplies and the amount of power consumed by each DL205 device. The Power Consumed charts list how much INTERNAL power from each power source is required for the DL205 devices. Use this information when calculating the power budget for your system.

In addition to the internal power sources, the DL205 bases offer a 24 VDC auxiliary power supply with external power connections. This auxiliary power supply can power external devices.

## Use ZIPLinks to reduce power requirements

If your application requires a lot of relay outputs, consider using the ZIPLink AC or DC relay output modules. These modules can switch high current (10A) loads without putting a load on your base power budget. Refer to the Terminal Blocks and Wiring Solutions section in this catalog for more information.

This logo is placed next to the I/O modules that are supported by the ZIPLink connection systems. See the I/O module specifications at the end of this section.



Power Consumed		
Device	5V(mA)	24V Auxiliary
<b>Operator Interface</b>		
DV-1000	150	0
C-more Micro-Graphic	210	0

Power Supplied							
Device	Price	5V(mA)	24V Auxiliary	Device	Price	5V(mA)	24V Auxiliary
<b>Bases</b>				<b>Bases</b>			
D2-03B-1	<--->	2600	300	D2-06BDC1-1	<--->	2600	None
D2-03BDC1-1	<--->	2600	None	D2-06BDC2-1	<--->	2600	300
D2-04B-1	<--->	2600	300	D2-09B-1	<--->	2600	300
D2-04BDC1-1	<--->	2600	None	D2-09BDC1-1	<--->	2600	None
D2-06B-1	<--->	2600	300	D2-09BDC2-1	<--->	2600	300

Power Consumed		
Device	5V(mA)	24V Auxiliary
<b>CPUs</b>		
D2-230	120	0
D2-240	120	0
D2-250-1	330	0
D2-260	330	0
H2-WPLC**	680	0
<b>DC Input Modules</b>		
D2-08ND3	50	0
D2-16ND3-2	100	0
D2-32ND3	25	0
D2-32ND3-2	25	0
<b>AC Input Modules</b>		
D2-08NA-1	50	0
D2-08NA-2	100	0
D2-16NA	100	0
<b>Input Simulator Module</b>		
F2-08SIM	50	0
<b>DC Output Modules</b>		
D2-04TD1	60	20
D2-08TD1	100	0
D2-08TD2	100	0
D2-16TD1-2	200	80
D2-16TD2-2	200	0
F2-16TD1P	70	50
F2-16TD2P	70	50
D2-32TD1	350	0
D2-32TD2	350	0
<b>AC Output Modules</b>		
D2-08TA	250	0
F2-08TA	250	0
D2-12TA	350	0
<b>Relay Output Modules</b>		
D2-04TRS	250	0
D2-08TR	250	0
F2-08TR(S)	670	0
D2-12TR	450	0
<b>Combination In/Out Module</b>		
D2-08CDR	200	0

Power Consumed		
Device	5V(mA)	24V Auxiliary
<b>Analog Modules</b>		
F2-04AD-1	100	5
F2-04AD-2	110	5
F2-08AD-1	100	5
F2-08AD-2	100	5
F2-02DA-1	40	60 (note 1)
F2-02DA-1L	40	70 @ 12V (note 1)
F2-02DA-2	40	60
F2-02DA-2L	40	70 @ 12V
F2-02DAS-1	100	50 / channel
F2-02DAS-2	100	60 / channel
F2-08DA-1	30	50 (note 1)
F2-08DA-2	60	140
F2-4AD2DA	60	80 (note 1)
F2-8AD4DA-1	35	100 (note 1)
F2-8AD4DA-2	35	80 (note 1)
F2-04RTD	90	0
F2-04THM	110	60
<b>Specialty Modules</b>		
D2-CTRINT	50*	0
D2-CM / D2-EM	100/130	0
H2-CTRIO	400	0
D2-DCM	300	0
F2-DEVNETS	160	0
F2-SDS-1	160	0
H2-PBC	530	0
H2-EBC(-F)	450, (640)	0
H2-ECOM(-F)	450, (640)	0
H2-ECOM100	300	0
F2-CP128	235	0
<b>Remote I/O</b>		
H2-ERM(-F)	320, (450)	0
D2-RMSM	200	0
D2-RSSS	150	0
<b>Programming Devices</b>		
D2-HPP	200	0

\*requires external 5VDC for outputs  
Note 1: Add an additional 20 mA per output loop.