

Serial Data Communications Module



Specifications	
Module Type	Intelligent
Modules per CPU	7 maximum, any slot except slot 0, CPU base only
CPUs Supported	D2-250-1, D2-260 and D2-262
Communications	RS-232/422 signal levels, <i>DirectNET</i> Master/Slave, K-sequence or Modbus RTU Slave protocol, Baud rate selectable from 300 baud to 38.4 Kbaud, Odd or No parity, <i>DirectNET</i> HEX or ASCII mode
Recommended Cable	Belden 9729 or equivalent (for RS-422)
Field Wiring Connector	25-pin D-shell connector
Internal Power Consumption	300mA maximum at 5VDC, (supplied by base power supply)
Operating Environment	0°C to 60°C (32°F to 140°F), 5% to 95% humidity (non-condensing)
Manufacturer	Koyo Electronics

The D2-DCM Data Communications Module is used primarily for three reasons:

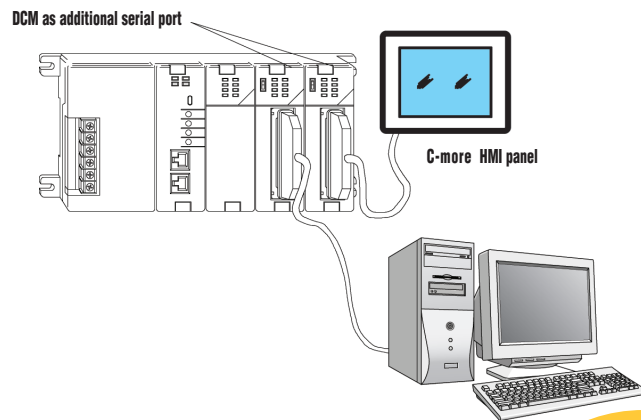
- Extra communications port to connect a PC, operator interface, etc.
- Network interface to *DirectNET*
- Network interface to a Modbus® network using the RTU protocol

Extra communications port

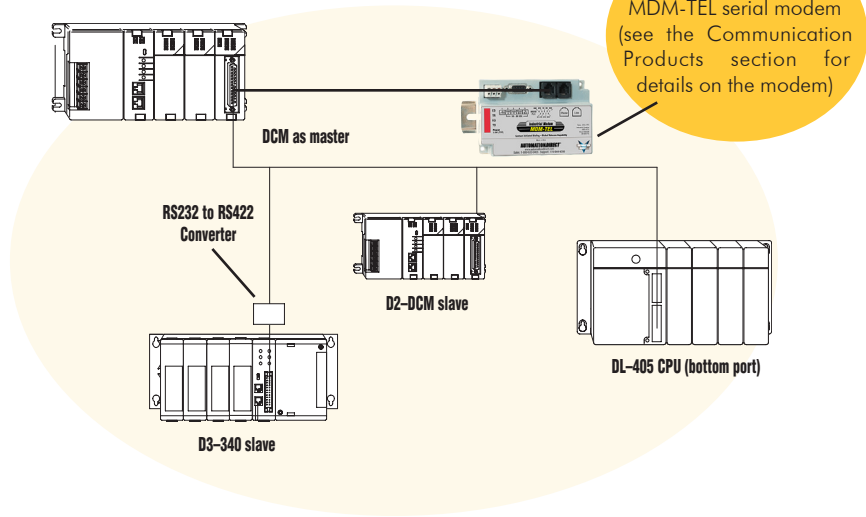
If additional communication ports are needed, they can easily be added by installing DCM modules. This allows additional connections of devices, such as operator interfaces, PCs, etc. Since the DCM does not require any programming, you can set the DCM communication parameters, connect the cables, and start transferring data. Make sure the device has a DL205 compatible driver.

DirectNET network interface

The DCM can be used as a network interface for applications requiring data to be shared between PLCs, or between PLCs and an intelligent device such as a host PC. The DCM connects easily to *DirectNET*. This network allows you to upload or download virtually any type of system data including Timer/Counter data, I/O information, and V-memory information from any *DirectLOGIC* or compatible PLC. The DCM allows the DL205 to function as a network master or network slave.



Master/Slave Network



Modbus RTU interface

The DCM can be used as a slave station interface to connect your DL205 system to a Modbus® network using the Modbus RTU protocol. The host system must be capable of issuing the Modbus commands to read or write the appropriate data. Remember that the bottom port on the D2-250-1, D2-260 and D2-262 CPUs can act as a Modbus master.



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
Operator Interface		
DV-1000	150	0
C-more Micro-Graphic	210	0

Power Supplied			
Device	Price	5V(mA)	24V Auxiliary
Bases			
D2-03B-1	\$134.00	2600	300
D2-03BDC1-1	\$152.00	2600	None
D2-04B-1	\$146.00	2600	300
D2-04BDC1-1	\$173.00	2600	None
D2-06B-1	\$179.00	2600	300

Power Consumed		
Device	5V(mA)	24V Auxiliary
CPUs		
D2-250-1	330	0
D2-260	330	0
D2-262	336	0
DC Input Modules		
D2-08ND3	50	0
D2-16ND3-2	100	0
D2-32ND3	25	0
D2-32ND3-2	25	0
AC Input Modules		
D2-08NA-1	50	0
D2-08NA-2	100	0
D2-16NA	100	0
Input Simulator Module		
F2-08SIM	50	0
DC Output Modules		
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
AC Output Modules		
D2-08TA	250	0
F2-08TA	250	0
D2-12TA	350	0
Relay Output Modules		
D2-04TRS	250	0
D2-08TR	250	0
F2-08TR(S)	670	0
D2-12TR	450	0
Combination In/Out Module		
D2-08CDR	200	0

Power Supplied			
Device	Price	5V(mA)	24V Auxiliary
Bases			
D2-06BDC1-1	\$197.00	2600	None
D2-06BDC2-1	\$187.00	2600	300
D2-09B-1	\$223.00	2600	300
D2-09BDC1-1	\$243.00	2600	None
D2-09BDC2-1	\$243.00	2600	300

Power Consumed		
Device	5V(mA)	24V Auxiliary
Analog Modules		
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
Specialty Modules		
D2-CTRINT	50*	0
D2-CM / D2-EM	100/130	0
H2-CTRIO2	275	0
D2-DCM	300	0
H2-EBC100	300	0
H2-EBC-F	640	0
H2-ECOM100	300	0
H2-ECOM-F	640	0
F2-CP128	235	0
Remote I/O		
H2-ERM100, (-F)	300, (-F: 450)	0
Programming Devices		
D2-HPP	200	0

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