

# DL05/06 Data Communications Module



## Overview

The D0-DCM Data Communications Module offers two communication ports for a variety of simultaneous communications possibilities:

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

The top RJ12 RS-232 port (Port 1) can be used for PLC programming, connection to an OI panel or as a single K-sequence, **DirectNet** or Modbus RTU slave. The 15-pin front port (Port 2) can be used for RS-232/422/485 communications and supports the following protocols: K-sequence slave, **DirectNET** master/slave and Modbus RTU master/slave.

## Module Configuration

Since the D0-DCM does not have DIP switches to set baud rate, station address, parity, etc., ladder logic programming is required to configure its communication parameters, unless the default settings are acceptable for your application. If the D0-DCM is to be used as a network master, you must use ladder logic code to configure these parameters.

Specifications	
<b>Module Type</b>	Intelligent
<b>Modules per CPU</b>	DL05: one; DL06: up to four
<b>Field Wiring Connectors</b>	Port 1: 6-pin RJ12 RS-232 Port 2: 15-pin HD-sub connector RS-232, RS-422/485
<b>Communications</b>	<b>Port 1</b>
	<b>Port 2</b>
<b>Recommended Cable</b>	RS-422: Belden 9729 or equivalent; RS-485: Belden 9841 or equivalent
<b>Internal Power Consumption</b>	250mA maximum at 5VDC (supplied by base)
<b>Operating Environment</b>	0°C to 60°C (32°F to 140°F), 5% to 95% humidity (non-condensing)
<b>Manufacturer</b>	Koyo Electronics

CPU	Firmware Required	DirectSOFT Required
<b>DL05</b>	Version 5.00 or later	Version 3.0c or later
<b>DL06</b>	Version 1.90 or later	Version 4.0, Build 16 or later

## Extra communications ports for DL05/06

If additional communication ports are needed in the PLC, they can easily be added by installing DCM modules. Connect additional devices such as operator interfaces, PCs, etc. Set the DCM communication parameters using **DirectSOFT** programming software, connect the cables, and start transferring data. Make sure the connected device has a DL05/06 compatible driver.



Connect the DCM to our MDM-TEL serial modem.



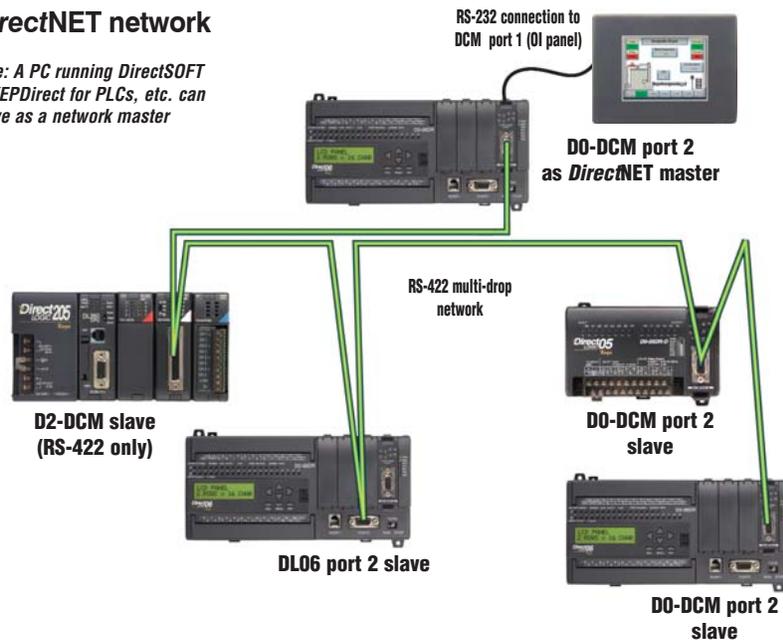
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## DirectNET network interface

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. DirectNET 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. Port 2 on the DCM allows the DL05/06 to function as a DirectNET network master or slave using RS-422 communications (RS-232 can be used for single slave networks). Use RX and WX instructions in your RLL program to initiate communications.

### DirectNET network

*Note: A PC running DirectSOFT or KEPDirect for PLCs, etc. can serve as a network master*



## Modbus RTU interface

The DCM can be used as a master or slave station interface to connect your DL05/06 system to a Modbus® network using the Modbus RTU protocol. Port 2 on the DCM allows the DL05/06 to function as a Modbus RTU network master or slave using RS-422 or RS-485 communications (RS-232 can be used for single slave networks). Use RX and WX instructions in your RLL program to initiate communications.

### Modbus RTU networks

