Access to different Fieldbus systems is now easier and less expensive for DeviceNet, Ethernet and Serial users.

January 2005
DW200573

DeviceNet to Serial/Ethernet

Features:

- Wide choice of connectivity with DeviceNet, Ethernet and Serial ports
- DIN Rail, IP20 mounting
- Easy configuration and diagnostic with simple software tool included
- Certified by the Open DeviceNet Vendors Association

Typical applications:

- Connecting serial devices
- Simple network extensions
- Remote data acquisition through Ethernet
- Monitoring your plant floor

Direct-Link™ Gateways are available for other networks:

- Profibus
- AS-Interface
- DeviceNet
- CANopen
- Modbus TCP/IP
- Modbus Serial

Product Description

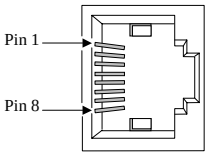
The Direct-Link™ DeviceNet to Serial or Ethernet Gateway supports local communications through an RS232/RS485 serial port, a 10/100 Base-T Ethernet port, and a DeviceNet port. Through the serial port, the gateway can be a Modbus Master or Slave node on a local Modbus network or a DF1 Slave or Master. Through the Ethernet port, a Direct-Link™ Gateway E/P can be a Modbus TCP Master or Slave node on an Ethernet network. Through the DeviceNet port, the gateway can be a DeviceNet Slave node on a DeviceNet network. Routing Tables are used to route messages received on a Modbus or Modbus TCP Slave node to devices on the other network. In addition, Network Data Mapping can be used to automatically transfer data between devices connected to the Direct-Link™ gateway. A simple software application is provided to create the routing tables and data mappings.

Related Products

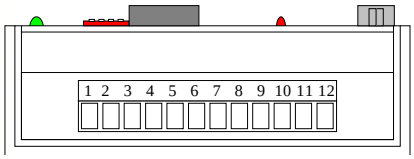
Part Number	Description
DRL-PFB-SRE	Direct-Link™ Gateway, Profibus to Serial or Ethernet
DRL-2ASI-CAN	Direct-Link™ Gateway, AS-i/CanOpen, 2 Channels, Display
DRL-2ASI-DN	Direct-Link™ Gateway, AS-i/DeviceNet, 2 Channels, Display
DRL-2ASI-ETH	Direct-Link™ Gateway, AS-i/Modbus TCP, 2 Channels, Display
DRL-2ASI-PFB	Direct-Link™ Gateway, AS-i/Profibus DP, 2 Channels, Display
DRL-2ASI-SER	Direct-Link™ Gateway, AS-i/Modbus Serial, 2 Channels, Display
APP-ETH-PCU	Combo 10-100 Ethernet + Serial interface card, Universal PCI
APP-ESR-GTW	applicom® Serial to Ethernet programmable gateway
DN-MTR	Diagnostic meter for DeviceNet
DN3020PM-1	DeviceNet Power Monitor - Tee - male to female

Direct-Link™ Gateway

Pin	Signal
1	Tx+
2	Tx-
3	Rx+
4	Unused
5	Unused
6	Rx-
7	Unused
8	Unused



RJ-45 female



Pin	Signal
1	+24 Vdc
2	Earth Ground
3	0 Vdc
4	RTS (RS232)
5	RxD (RS232)
6	TxD (RS232)
7	Signal Ground
8	D- (RS485) (IN)
9	D+ (RS485) (IN)
10	Signal Ground
11	D- (RS485) (OUT)
12	D+ (RS485) (OUT)

Environmental Specifications

Input Voltage	6 V to 28 V DC
Current Consumption	Dependant on configuration
Operating Temperature	-30°C to +70°C (-22°F to +158°F)

General Specifications

Dimensions	99.7 x 75 x 110mm (3.925 x 2.952 x 4.330 inches)
Switches	4-position DIP Switch

Ethernet

Connector	UTP (10 Base-T/100 Base-TX) RJ-45
Physical Medium	UTP 10 Base-T/100 Base-TX
Baud Rates	10, 100 Mbps
Protocols	Modbus TCP (Master/Slave)

DeviceNet

Connector	DeviceNet Open Connector (Male)
Physical Medium	CAN bus
Baud Rates	125, 250, 500 Kbps
Protocols	DeviceNet Slave

Serial

Socket **Mating Plug**	Entrelec™ – L253 109 11 000 Entrelec™ – L243 209 01 000
Physical Medium	RS232 RS485 (2-wire half-duplex)
Baud Rates	300, 600, 1200, 2400, 4800, 9600, 19200 bps, 38.4, 57.6, 76.8, 93.7, 115.2, 187.5, 230.4 kbps
Parity	Even/Odd/None
Data Bits	7/8
Flow Control	None/RTS/RTS Delay
Protocols	Modbus RTU (Master/Slave) Modbus ASCII (Master/Slave)

Ordering Information

Part Number	Description
DRL-DVN-SRE	Direct-Link™ Gateway, DeviceNet to Serial or Ethernet

applicom® Gateways and Interface Cards are used for more complex applications.

Gateway

Woodhead

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