



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

January 2005  
DW200576

## Profibus to Serial or Ethernet

### Features:

- Wide choice of connectivity with Profibus, Ethernet and Serial ports
- DIN Rail, IP20 mounting
- Easy configuration and diagnostics with simple software tool included
- Certified by the Profibus Organization



### 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™ Profibus to Serial or Ethernet Gateway supports local communications through an RS232/RS485 serial port, a 10/100 Base-T Ethernet port, and a Profibus port. Through the serial port, the gateway can be a Modbus Master or Slave node on a local Modbus network. 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 Profibus port, the gateway can be a Profibus DP Proxy to a single Profibus DP Slave, or a Profibus DP Slave node on a Profibus 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
<b>DRL-DVN-SRE</b>	Direct-Link™ Gateway, DeviceNet to Serial or Ethernet
<b>DRL-2ASI-CAN</b>	Direct-Link™ Gateway, AS-i/CanOpen, 2 Channels, Display
<b>DRL-2ASI-DN</b>	Direct-Link™ Gateway, AS-i/DeviceNet, 2 Channels, Display
<b>DRL-2ASI-ETH</b>	Direct-Link™ Gateway, AS-i/Modbus TCP, 2 Channels, Display
<b>DRL-2ASI-PFB</b>	Direct-Link™ Gateway, AS-i/Profibus DP, 2 Channels, Display
<b>DRL-2ASI-SER</b>	Direct-Link™ Gateway, AS-i/Modbus Serial, 2 Channels, Display
<b>APP-ETH-PCU</b>	Combo 10-100 Ethernet + Serial interface card, Universal PCI
<b>APP-EPB-PCU</b>	Combo 10-100 Ethernet + Profibus 1.5 M interface card, Universal PCI
<b>APP-ESP-GTW</b>	applicom® Profibus to Serial or Ethernet programmable gateway

Woodhead

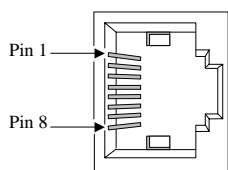


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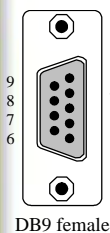
# Direct-Link™ Gateway



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

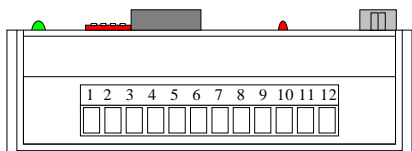


RJ-45 female



DB9 female

Pin	Signal
1	Unused
2	Unused
3	Data +
4	Tx Enable
5	Isolated Gnd
6	Isolated +5V
7	Unused
8	Data -
9	Unused



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

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

## General Specifications

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

## Ethernet

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

## Profibus

<b>Connector</b>	DB9F
<b>Physical Medium</b>	RS485 (2-wire half-duplex)
<b>Baud Rates</b>	9.6, 19.2, 31.25, 45.45, 93.75, 187.5, 500 kbps, 1.5, 3, 6, 12 Mbps
<b>Protocols</b>	Profibus DP (Proxy/Slave)

## Serial

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

## Ordering Information

Part Number	Description
DRL-PFB-SRE	Direct-Link Gateway, Profibus to Serial or Ethernet



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