



BradCommunications<sup>™</sup> gateways provide an easy-to-use and cost-effective solution for accessing a wide range of fieldbus systems.

### **PROFIBUS Gateway**

Connect PROFIBUS to Serial or Ethernet Devices



### **Product Description**

The Direct-Link<sup>™</sup> 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 or a DF1 master. Through the Ethernet port, a Direct-Link<sup>™</sup> 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
DRL-DVN-SRE	Direct-Link Gateway, DeviceNet 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-EPB-PCU	Combo 10-100 Ethernet + PROFIBUS 1.5 M interface card, Universal PCI
APP-ESP-GTW	applicom® PROFIBUS to Serial or Ethernet gateway
APP-PNT-GTW-P	Applicom PROFINET I/O proxy

#### **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<sup>™</sup> gateways are available for other networks

- Allen-Bradley DF1
- AS-Interface
- CANopen
- DeviceNet
- Modbus TCP/IP
- Modbus Serial
- PROFIBUS
- PROFINET



## Direct-Link<sup>™</sup> Gateway





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

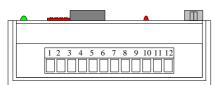
Signal

Pin

RJ-45 female

# DB9 female

Unused 2 Unused 3 Data + Tx Enable Isolated Gnd Isolated +5V Unused Data -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**

Input Voltage	6 V to 28 V DC
<b>Current Consumption</b>	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)

### **PROFIBUS**

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

### Serial

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Socket	Entrelec™ – L253 109 11 000
Mating Plug	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	Allen-Bradley DF1 (master)
	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

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