



## DH-485 to Honeywell DE Master Gateway

### 5106-DH485-DEM

The ProLinx DH-485 to Honeywell DE Master Gateway creates a powerful connection between devices on a DH-485 network and Honeywell DE devices. This stand-alone DIN-rail mounted protocol gateway provides one DH-485 configurable serial port and up to eight configurable Honeywell DE Master channels.

The DH-485 protocol driver supports the Master and the Slave modes of the protocol on each port, providing powerful data transfer capability with Rockwell Automation PLCs and HMIs. All DH-485 ports are individually configurable. User configurable data mapping make the interface an easy to use and powerful data transfer tool.

The DEM protocol driver is designed to provide a tightly integrated communications interface between other protocols of the ProLinx platform and the Honeywell DE instruments. Compatible DE devices include a large array of field devices including pressure, temperature, metering, and many other instruments.

### DH-485

The DH-485 protocol in its native form is a peer to peer token passing network. The ProLinx DH-485 driver accesses the network functioning either as a Master or as a Slave.

#### General Protocol Information

|                          |   |
|--------------------------|---|
| Error Checking           | BCC and CRC   |
| Communication Parameters | Local Station ID: 0 to 31<br>Port 0 Baud Rate: 110 to 38.4K baud<br>Port 1 Baud Rate: 110 to 19200 baud<br>Stop Bits: 1 or 2<br>Data Size: 7 or 8 bits<br>Parity: None, Even, Odd<br>RTS Timing delays: 0 to 65535 ms |

### DH-485 Slave Mode

In Slave mode, the module accepts commands from one or more Masters to read/write data stored in the module's internal data memory. In this mode, the ProLinx unit is answering DH-485 commands and has the appearance of an SLC processor to the network.

### DH-485 Master Mode

In Master mode, the ProLinx DH-485 driver will actively gather data from other devices on the network, controlling the read/write data transfer between the gateway and other DH-485 devices, such as SLC processors. Data transfer can be initiated and executed with the other devices without any ladder logic being required in the Rockwell Automation slave hardware.

## DH-485 to Honeywell DE Master Gateway 5106-DH485-DEM

*The DH485-DEM modules are the ideal solution for the many applications where DH-485 connectivity can be used to integrate Honeywell DE devices into a system. The DH-485 gateway is a powerful module designed with both Master and Slave support, enabling easy connection to Rockwell Automation PLCs (CLX, SLC, PLC, CPLX, and similar devices). In combination with the Honeywell DE device support, the module provides a very powerful interface to the many Honeywell DE devices which are in use in the industrial marketplace today. Applications for the module are found in most industries, especially Manufacturing, Oil and Gas, Electrical Power and Food Processing.*

### How to Contact Us: Sales and Support

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### DH485 Functioning as a Master

|                         |  |
|-------------------------|--|
| Command List            | Up to 100 command per master port, each fully configurable for function, slave address, register to/from addressing and word/bit count |
| Polling of command list | User configurable polling of commands, including disabled, continuous and on change of data (write only)                               |

### Honeywell DE Master

The ProLinx DEM Protocol Driver is designed to interface with up to eight DE devices. Data is exchanged between the DE instruments and the driver using the internal database contained in the DEM module.

### DE Communications

- Built in accordance with the Honeywell DE specification
- Supports up to eight single PV transmitters, 2 multivariable transmitters with 4 PVs each, or a mix of single and multivariable equaling eight total input channels
- Instrument database mismatch verification
- Interfaces directly to Honeywell Field Terminal Assembly (FTA) with ProSoft-supplied cable
- Supports redundant and non-redundant FTA implementations
- Single cable connection from DEM module to FTA

### Physical Specifications

|                               |   |
|-------------------------------|---|
| Power Source                  | External 24 Vdc source connection on the front of the DEM module provides instrument loop power |
| LEDs for Visual Module Status | DE Active<br>DE Error   |

### General Specifications

The ProLinx Communication Modules provide connectivity for two or more dissimilar network types. The modules, encased in sturdy extruded aluminum, are stand-alone DIN-rail mounted protocol gateways, providing communication between many of the most widely used protocols in industrial automation today.

### Hardware Specifications

| Specification         | Description   |
|-----------------------|---|
| Power Supply          | 24 Vdc nominal<br>18 to 36 Vdc allowed<br>Positive, Negative, GND Terminals<br>2.5 mm screwdriver blade           |
| Current Load          | 500 mA max@ 24 Vdc  |
| Operating Temperature | 0°C to +50°C (+32°F to +122°F)  |
| Storage Temperature   | -40°C to +85°C (-40°F to +185°F)  |
| Relative Humidity     | 5 to 95% with no condensation   |
| Dimensions            | Standard: 5.20H x 2.07W x 4.52D in.<br>(13.2cmH x 5.25cmW x 11.48cmD)   |
| LED Indicators        | Power and Module Status<br>Application Status<br>Serial Port Activity LED<br>Serial Activity and Error LED Status |

| Specification                         | Description   |
|---------------------------------------|---|
| Configuration Serial Port             | MiniDIN 8, with adapter cable to change MiniDIN 8 to DB9M<br>RS-232 only<br>No hardware handshaking   |
| Ethernet Port (Ethernet modules only) | RJ45 Connector<br>Link and Activity LED indicators  |
| Application Serial Ports              | MiniDIN 8, with adapter cables to DB9M<br>RS-232/422/485<br>RS-232 handshaking configurable<br>RS-422/485 screw termination included  |
| Serial Port Isolation                 | 2500V RMS port signal isolation per UL 1577<br>3000V DC min. port to ground and port to logic power isolation   |
| Shipped with Each Unit                | Mini-DIN to DB-9M serial cables<br>4 ft RS-232 configuration cable<br>2.5mm screwdriver<br>CD (docs and Configuration utility)<br>RS-422/485 DB-9F to Screw Terminal<br>Adaptor (one for each application port) |

### ProSoft Configuration Builder

ProSoft Configuration Builder (PCB) provides a quick and easy way to manage module configuration files customized to meet your application needs. PCB is not only a powerful solution for new configuration files, but also allows you to import information from previously installed (known working) configurations to new projects.

### Additional Products

ProSoft Technology offers a full complement of hardware and software solutions for a wide variety of industrial communication platforms.

Visit our web site at <http://www.prosoft-technology.com> for a complete list of products.

### Ordering Information

To order this product, please use the following:

**5106-DH485-DEM** DH-485 to Honeywell DE Master Gateway

To place an order, please contact your local ProSoft Technology distributor. For a list of ProSoft distributors near you, go to <http://www.prosoft-technology.com>

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