





# DH-485 to ASCII Generic Serial Gateway 5102-DH485-ASCII3

The DH485-ASCII modules are the ideal solution for the many applications where DH-485 connectivity can be used to integrate ASCII serial input device 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 ASCII device support, the module provides a very powerful interface to the many ASCII 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**

All ProSoft Technology® products are backed with unlimited technical support. Contact our worldwide Technical Support team directly by phone or email:

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# DH-485 to ASCII Generic Serial Gateway

# 5102-DH485-ASCII3

The ProLinx DH-485 to ASCII Generic Serial Gateway creates a powerful connection between devices on a DH-485 network and ASCII input devices. This stand-alone DIN-rail mounted protocol gateway provides one DH-485 configurable serial port and three ASCII configurable serial ports.

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 ASCII protocol driver permits the module to interface to many ASCII devices. Each ASCII port on the module is configurable to send and/or receive ASCII strings, each supporting its own individual serial network.

#### 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
	Port 0 Baud Rate: 110 to 38.4K baud
	Port 1 Baud Rate: 110 to 19200 baud
	Stop Bits: 1 or 2
	Data Size: 7 or 8 bits
	Parity: None, Even, Odd
	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.



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)

#### **ASCII**

The ASCII driver provides a powerful connection between the internal application database in the ProLinx unit and devices supporting serial ASCII communications (bar code scanners, line printers, legacy terminal based computer systems, etc).

The serial port on the gateway is user-configurable to support ASCII communications (Baud rate, Data Bits, Stop Bits, etc). The ASCII port can act as a Master (Send ASCII strings) or as a Slave (Receive ASCII strings), or both.

ASCII Specifications	
Ports	Available in up to four port configurations to receive and/or transmit data.
Transmit and Receive buffer size	255 bytes each
Transmit character with pacing	0 to 65535 millisecond delay between each transmitted character.

# **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
	18 to 36 VDC allowed
	Positive, Negative, GND Terminals
	2.5 mm screwdriver blade
Current Load	500 mA max@ 24 VDC
Operating Temperature	–20 to 50°C (–4 to 122°F)
Storage Temperature	-40 to 85°C (-40 to 185°F)
Relative Humidity	5 to 95% (non-condensing)
Dimensions	Standard: 5.20H x 2.07W x 4.52D in.
	(13.2cmH x 5.25cmW x 11.48cmD)
	Extended: 5.20H x 2.73W x 4.52D in.
	(13.2cmH x 6.934cmW x 11.48cmD)
LED Indicators	Power and Module Status
	Application Status
	Serial Port Activity LED
	Serial Activity and Error LED Status
Configuration Serial Port	DB-9M RS-232 only
	No hardware handshaking

Description
RJ45 Connector Link and Activity LED indicators
RS-232/422/485
RS-232 handshaking configurable
RS-422/485 screw termination included
2500V RMS port signal isolation per UL 1577
3000V DC min. port to ground and port to logic power isolation
Mini-DIN to DB-9M serial cables
4 ft RS-232 configuration cable
2.5mm screwdriver
CD (docs and Configuration utility)
RS-422/485 DB-9 to Screw Terminal Adaptor (1 or 4, depending on ports)

# **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:

5102-DH485-ASCII3 DH-485 to ASCII Generic Serial 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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