Rockwell Automation Remote I/O to DNP 3.0 Slave Gateway
5601-RIO-DNPS

The RIO-DNPS modules are the ideal solution for the many applications where Remote I/O connectivity can be used to integrate DNP serial devices into a system. The RIO gateway is a powerful module designed with both Client and Server support, enabling easy connection to Rockwell Automation PLCs (CLX, SLC, PLC, CPLX, and similar devices). In combination with the DNP device support, the module provides a very powerful interface to the many DNP 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:

Asia Pacific
+603.7724.2080, asiapc@prosoft-technology.com
Languages spoken include: Chinese, Japanese, English

Europe – Middle East – Africa
+33 (0) 5.34.36.87.20, support.EMEA@prosoft-technology.com
Languages spoken include: French, English

North America
+1.661.716.5100, support@prosoft-technology.com
Languages spoken include: English, Spanish

Latin America (Sales only)
+1.281.298.9109, latinam@prosoft-technology.com
Languages spoken include: Spanish, English

Brasil
+55-11.5084.5178, eduardo@prosoft-technology.com
Languages spoken include: Portuguese, English

Rockwell Automation Remote I/O to DNP 3.0 Slave Gateway

5601-RIO-DNPS
The ProLinx Rockwell Automation Remote I/O Adapter to DNP 3.0 Slave Gateway creates a powerful connection between devices on a Remote I/O network and DNP devices. This stand-alone DIN-rail mounted protocol gateway provides one configurable serial port and one RIO port.

The RIO interface is an adapter (slave) which can be connected to a scanner (master) that controls the data transfer. The module also supports limited high speed data transfer via the Input and Output images.

The DNP 3.0 Slave protocol driver supports Slave implementations of the protocol on one port. This port is fully configurable.

Rockwell Automation Remote I/O
The RIO interface is an adapter (slave) and is connected to a scanner (master) that controls the data transfer. For example, the master/slave relationship can be accomplished using the RIO module (adapter/slave unit) with a Rockwell Automation PLC5 (scanner/master unit). Ladder logic must be programmed into a PLC to perform BTR/BTW commands to receive and transmit data between the module and the PLC. The module also supports limited high speed data transfer via the input and output images.

Software Configurable Parameters	
Rack Number Addressing	0 to 63
Rack Size	¼-rack, ½-rack, ¾-rack and full rack
Starting Group	0,2,4,6
Last Rack	Yes or No
Baud Rate	57.6K, 115K, 230K

Functional Specifications
Supports block-transfers of data with scanner
Supports I/O data movement. Amount determined by rack size configuration
BTW Command – up to 64 words
BTR Command – up to 63 words

Physical Connection	
Remote I/O connector	Standard 3-screw termination connector

DNP 3.0 Slave

The DNP 3.0 Slave driver provides extensive support for Slave implementations of the protocol. The serial port on the gateway is user-configurable to support the DNP 3.0 protocol (Slave, Error Checking, Baud rate, etc).

General Parameters

Internal Database	Binary Inputs: 0 to 500 word count
	Analog Inputs: 0 to 500 points
	Counters: 0 to 250 points
	Binary Outputs: 0 to 200 word count
	Analog Outputs: 0 to 500 points
	Binary Input Events: 0 to 100 event buffer
	Analog Input Events: 0 to 100 event buffer
Communication parameters	Baud Rate: 110 to 115K baud
	Stop Bits: 1
	Data Size: 8 bits
	Parity: None
	RTS Timing delays: 0 to 65535 ms
DNP Mode	DNP 3.0 Slave – Level 2

DNP Slave

Node address	0 to 65534 (software selectable)

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

Specification	Description
Configuration Serial Port	DB-9M RS-232 only
	No hardware handshaking
Ethernet Port (Ethernet modules only)	RJ45 Connector
	Link and Activity LED indicators
Application Serial Ports	RS-232/422/485
	RS-232 handshaking configurable
	RS-422/485 screw termination included
Serial Port Isolation	2500V RMS port signal isolation per UL 1577
	3000V DC min. port to ground and port to logic power isolation
Shipped with Each Unit	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:

5601-RIO-DNPS   Rockwell Automation Remote I/O to DNP 3.0 Slave 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

Distributors:
Place your order by email or fax to:

North American / Latin American / Asia Pacific
orders@prosoft-technology.com,
fax to +1 661.716.5101

Europe
europe@prosoft-technology.com,
fax to +33 (0) 5.61.78.40.52

May 03, 2007