

PROTOCON-P5

(Modbus to BACnet converter)

A gateway for your Building Automation solution

Protocon is a cost effective solutions to connect equipment's with dissimilar communication protocols and physical Media.

The BACnet/IP client (Master) communicates with Protocon over Ethernet (BACnet/IP Protocol). Protocon communicates with Modbus devices over its RS-485 2 port (Modbus-RTU) or one Ethernet port (Modbus-TCP).

There are two RS485 ports. Each port can individually connect 32 Modbus-RTU devices.

Key Features

- Aluminum enclosure for use in harsh environment
- Extended Operating Temperature range
- Ability to interface up to 1000 mapping points
- Web based configuration utility
- Supports COV, bit packing feature for binary and multistate inputs and value
- Embedded Web Server for device health monitoring
- Front panel LED indication for quick diagnostic

Protocols Supported

- BACnet/IP Internet Protocol (IP), 10BaseT, BBMD supported, (Annex J)
- Modbus TCP/IP , Modbus RTU

Communication Interface

- 10/100 Mbps Ethernet with auto-negotiation
- serial port supports either 2-wire or 3-wire EIA-485
- Baud rates from 2.4 to 115.2 kbps. The baud rate can be set with Web based configuration

Input Power

- 24V AC/DC Power supply
- DIN-Rail mounting



WEB BASED CONFIGURATION



Protocon Modbus RTU - Bacnet IP

Protocon Statistics

Mon Oct 8 16:14:36 IST 2012

Protocon Firmware Version:	5.0
Protocon Model:	Modbus RTU - Bacnet IP
No:of Data Point Mappings:	2
Modbus Communication Mode:	Modbus RTU

Activity	Count	Communication Status			
BACnet Packets Received	325	BACnet			
BACnet Packet Sent	325	COM 1		COM 2	
Modbus Requests Sent	38	Modbus Tx		Modbus Tx	
Modbus Responses Received	38	Modbus Rx		Modbus Rx	
Modbus Error Responses Received	0	Error			

Channel Settings:

Name	Serial Port	Settings
Channel1	COM1	19200,8E1
Channel2		
Channel3		
Channel4		

BACnet Device Settings:

Parameter	Value
Device Instance	11
IP Address	192.168.1.50
Gateway	192.168.1.1
Subnet Mask	255.255.255.0

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A Web based configuration utility provides powerful interface for quickly defining the mapping of BACnet objects and properties to Modbus registers. This utility provides features like,

- Configuration of Modbus, BACnet and device settings.
- The user can also use features like data-point polling and COV Notification processing for optimized access to BACnet device data-points.
- The user can also define his/her mapping list in a MS Excel file (pre-defined format) and then import them.
- Device management configuration for and Factory default settings and IP change.

TECHNICAL SPECIFICATIONS

MECHANICAL	Rugged Aluminium Enclosure; DIN Rail Mount.
ELECTRICAL	Input Voltage 24V AC/DC, 1000mA .
Diagnostic	LEDs Power/Error – Red, Modbus/BACnet Activity Indication Green Ethernet: Link – Green, Activity – Yellow
ENVIRONMENTAL	Operating Temperature 0 to 60 deg C (Standard); Humidity 10-90% non-condensing
PROCESSOR	CPU Fan less – ARM Speed Upto 475MHz Software malfunction protection Watchdog timer
INTERFACES	BACnet Client Ethernet (UDP/IP); Modbus Slave Choice of 2 - RS485 ports Ethernet (TCP/IP) – RJ45 RS-485 (Screw-terminal)
COMMUNICATION	RS485: 256 Kbps; Eth: 10/100 Mbps
SOFTWARE	Web-Based GUI Configurator for data points mappings

PROTOCOLS SUPPORTED

BACnet Stack

Object Access Services

- Read Property
- Read Property Multiple
- Write Property
- Write Property Multiple
- COV Notification and Internsic Reporting

Supported Properties

- Present Value

Objects Supported

- Analog Input/Analog Output/Analog Value
- Binary Input/Binary Output/Binary Value
- Multistate Input/Multistate Output/Multistate Value
- Life Safety Point and Life Safety Zone
- Large Analog Value

Modbus Stack

Function Code:

- Read Coils (FC 0x01)
- Read Discrete Inputs (FC 0x02)
- Read Holding Registers (FC 0x03)
- Read Input Registers (FC 0x04)
- Write Single Coil (FC 0x05)
- Write Single Register (FC 0x06)
- Write Multiple Coils (FC 0x0F)
- Write Multiple Registers (FC 0x10)

PRODUCT ORDERING INFORMATION:

PRODUCT NAME	PRODUCT CODE
Modbus RTU(RS485) to BACnet/IP converter supporting 1000 mappings	SLXPC-P5-MB-BN-12
Modbus TCP to BACnet/IP	SLXPC-P5-MB-BN-22

Applications:



BACnet
CONTROLLER



PROTOCON



DUBAI
METRO



BUILDING
AUTOMATION



UPS



HVAC



ENERGY METERS



Contact US

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