

## BACnet/IP Client to PROFIBUS DP-V0 Slave Gateway 5205-BACNET-PDPS

The ProLinx<sup>®</sup> BACnet/IP Client to PROFIBUS DP-V0 Slave gateway creates a powerful connection between a PROFIBUS Master and BACnet/IP server devices. This stand-alone, DIN-rail-mounted, dual-protocol gateway provides a PROFIBUS Slave port and a BACnet/IP Client Ethernet port.

The PROFIBUS Slave protocol supports the PROFIBUS DP-V0 implementation, providing powerful data transfer capability between the ProLinx gateway and a PROFIBUS DP Master. With relatively few options to adjust, the PROFIBUS DP Slave configuration is quick, simple, and easily accomplished, using the provided ProSoft Configuration Builder software.

The ProLinx BACnet/IP (Building Automation and Control networking) protocol implementation is designed specifically to meet the communication needs of building automation and control systems by providing limited BACnet/IP command support for such applications as heating, ventilating, and air-conditioning control, lighting control, access control, and fire detection systems.



Features	Benefits
Powerful network integration	<ul style="list-style-type: none"> <li>◆ Move data between dissimilar networks using two communication protocols on one gateway</li> <li>◆ Protocols share access to a common memory database to exchange data between networks</li> <li>◆ View diagnostic data for both networks from a single configuration/debug port</li> </ul>
BACnet/IP Client	<ul style="list-style-type: none"> <li>◆ Standard protocol for Building Automation and Control limited to Analog and Digital I/O commands</li> <li>◆ Communicate with Building Automation controllers, HVAC, Fire and Safety equipment</li> <li>◆ Support for Trane Building Control Unit (BCU)</li> </ul>
PROFIBUS DP-V0 Slave	<ul style="list-style-type: none"> <li>◆ Adds BACnet/IP device monitoring and control to a PROFIBUS DP network</li> <li>◆ Easy configuration - GSD file provided</li> <li>◆ 122 words input/122 words output, 200 words maximum I/O</li> </ul>
Backed by ProSoft Technology	<ul style="list-style-type: none"> <li>◆ 20-year history of delivering high-quality, reliable solutions designed with you in mind</li> <li>◆ Free, unlimited, worldwide Technical Support by phone for pre-sale, set-up, or troubleshooting support helps you get going sooner and stay running longer</li> <li>◆ Three-Year Warranty ensures reliability and protects against equipment failures</li> </ul>

## Configuration

ProSoft Configuration Builder (PCB) provides a PC-based software configuration solution for quick and easy management of gateway configuration files, as well as viewing communication and network diagnostics.

PCB is not only a powerful solution for new configuration files, but also allows you to import information from previously installed (known working) configurations into new projects.

## General Specifications

The ProLinx<sup>®</sup> 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.

- Ethernet Configuration Port serves as a dual BACnet/IP Client application port
- DIN to DB-9M serial port cable included per configurable serial port

### BACnet/IP Client

- The BACnet<sup>®</sup> driver supports a single UDP client to interface with one or more devices that contain a BACnet/IP server
- The ProLinx BACnet/IP driver implements a limited subset of the BACnet/IP protocol primarily used with the Trane<sup>®</sup> BCU
- The module controls the read/write data transfer between the gateway and other BACnet/IP devices

### PROFIBUS DP-V0 Slave

- Input and Output data blocks are mapped by the user within the ProLinx module's data memory allowing the user maximum flexibility and data transfer with other protocols.
- A standard PRLX05A5.GSD file is provided on the Product CD
- Baud rate communication parameters: 9.6 kbps to 12 Mbps
- Status Data Error codes available on an individual command basis

## Functional Specifications

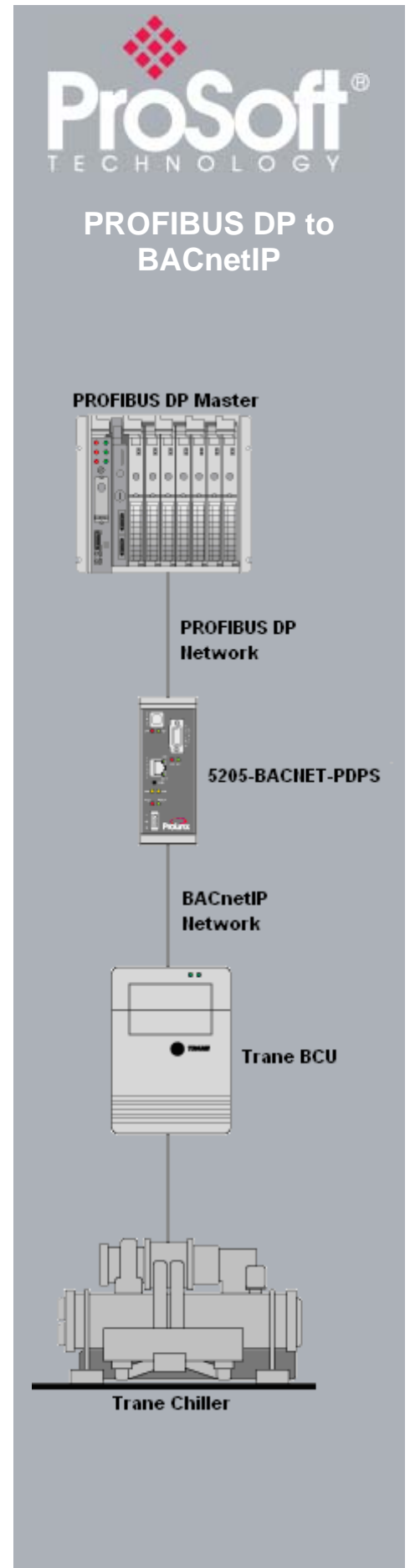
### BACnet/IP Client

The BACnet/IP Client can be used to interface many different protocols with Ethernet-enabled BACnet devices. The ProLinx BACnet/IP driver implements a limited subset of the BACnet/IP protocol. Contact ProSoft Technology<sup>®</sup> Technical Support if you have any protocol compliance or functionality questions.

General	One client
Command List	Support for 100 commands, each configurable for command, IP address, register to/from addressing and word/bit count.
Service Port	1 to 65535
Function Code (limited)	12=Read Single Property 14=Read Multiple Properties 15=Write Single Property 16=Write Multiple Property
Data Type (limited)	0=Analog Input 1=Analog Output 3=Binary Input 4=Binary Output
Point Count	1 to 25

### PROFIBUS DP-V0 Slave

Slave configurable parameters	PROFIBUS Node Address: 1 to 125 Data byte swapping Failsafe Action Communication Failure Mode
Supported I/O length	244 bytes Input data 244 bytes Output data 400 bytes total
PROFIBUS DP-V0 Support	Siemens SPC3 chipset Freeze Mode Sync Mode Auto Baud Setting
Read/Write Mailbox Commands	Commands allowing 1800 extended I/O data bytes



## Hardware Specifications

Specification	Description
Power Supply	24 VDC nominal 18 to 32 VDC allowed Positive, Negative, GND Terminals 2.5 mm screwdriver blade
Current Load	500 mA max @ 32 VDC max
Operating Temperature	-4° F to 122° F (-20° C to 50°C)
Storage Temperature	-40° F to 185° F (-40° C to 85°C)
Relative Humidity	5% to 95% (without condensation)
Dimensions (Height x Width x Depth)	Standard: 5.20 in x 2.07 in x 4.52 in (13.2 cm x 5.25 cm x 11.48 cm) Extended: 5.20 in x 2.73 in x 4.52 in (13.2 cm x 6.934 cm x 11.48 cm)
LED Indicators	Power and Module Status Application Status Serial Port Activity LED Serial Activity and Error LED Status
BACnet/IP and Configuration Ethernet Port	10 Base-T half duplex RJ45 Connector Link and Activity LED indicators Electrical Isolation 1500 V rms at 50 Hz to 60 Hz for 60 s, applied as specified in section 5.3.2 of IEC 60950: 1991 Ethernet Broadcast Storm Resiliency = less than or equal to 5000 [ARP] frames-per-second and less than or equal to 5 minutes duration
PROFIBUS Slave Port	RS485, max. 12 MBit/s, isolated, EN 50170
Shipped with Each Unit	Mini-DIN8-to-DB9M Adapter cable 6 ft RS232 null-modem configuration cable CD (docs and Configuration utility)

## Agency Approvals & Certifications

UL/cUL	ISA 12.12.01 Class I, Div 2 Groups A, B, C, D
cUL	C22.2 No. 213-M1987



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## Additional Products

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

For a complete list of products, visit our web site at:  
[www.prosoft-technology.com](http://www.prosoft-technology.com)

## Ordering Information

To order this product, please use the following:

### BACnet/IP Client to PROFIBUS DP-V0 Slave Gateway

5205-BACNET-PDPS

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