

# Raptor Protocol Converter



Standard  
Protocol Converter



Dual Port  
Protocol Converter

The Protocol Converter connects directly to equipment and converts the SNMP, BACnet, and Modbus protocols to one or more of these same protocols for integration into a building management system (BMS) or network management system (NMS). The Protocol Converter is ideal for situations where data from monitored equipment is incompatible with the protocols used by the BMS or NMS, such as in cases where legacy monitoring systems are present.

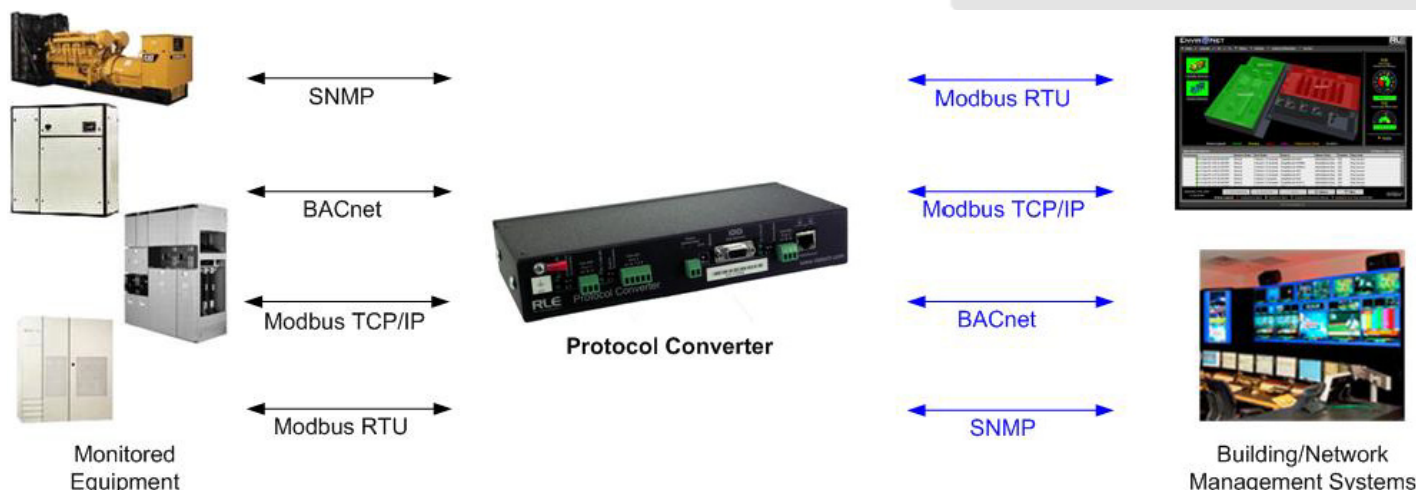
The ability of the Protocol Converter to accept up to 1,024 inputs over 32 modules means flexible integration with multiple alarm and management systems with the use of one simple device. In addition, the Dual Port Protocol Converter provides a cost-effective means to connect to multiple trunk lines with two additional Modbus EIA-485 ports.

## Features

- Multiple input and output protocols
- Monitor up to 1,024 Modbus registers, OIDs, or instances
- Connect up to 32 units/modules/nodes
- Connect to multiple trunk lines with Dual Port Protocol Converter
- Alarm notification through email, SNMP
- Web configuration

## Benefits

- Easy integration with various equipment
- Communicates with building management and network management systems
- Flexible configuration
- Economical integration solution



Example of a network incorporating the Protocol Converter

# Integration

# Protocol Converter Specifications

|   |  |
|---|--|
| <b>Power</b>                                      | 24VAC @ 600mA max, 50/60Hz, 24VDC @ 600mA max.   |
| <b>Communication Ports</b>                        |  |
| Ethernet  | 10/100BaseT, RJ45 connector; 500VAC RMS isolation  |
| EIA-232   | DB9 female connector; 9600 baud; No parity, 8 data bits, 1 stop bit  |
| EIA-485   | 1200, 2400, 9600 or 19200 baud (selectable); Parity: none, even or odd, 8 data bits, 1 stop bit                    |
|   | Dual Port Protocol Converter contains 2 additional EIA-485 ports (Port 2 configurable for half- or full-duplex)    |
| <b>Protocols</b>                                  |  |
| TCP/IP; HTML, TFTP                                | V1: V2C MIB-2 compliant; NMS Manageable with Get   |
| SNMP  | Modbus Master/Slave; RTU mode; Supports Master codes 01, 02, 03, 04; Slave code 03                                 |
| Modbus (EIA-485)                                  | Modbus Master/Slave; TCP/IP transmission protocol  |
| Modbus TCP/IP                                     | ASHRAE STD 135-2004 Annex J; Port 3 on Dual Port Protocol Converter is BACnet MS/TP capable (Slave only)           |
| BACnet/IP   | Supports Client Authentication (plain and login); compatible with ESMTP Servers                                    |
| SMTP (email)                                      | VT100 compatible (for configuration and diagnostics only)  |
| Terminal Emulation (EIA-232)                      |  |
| <b>Protocols In</b>                               | SNMP, Modbus EIA-485, Modbus TCP/IP, BACnet/IP   |
| <b>Protocols Out</b>                              | SNMP, Modbus EIA-485, Modbus TCP/IP, BACnet/IP; BACnet MS/TP (Port 3 of Dual Port Protocol Converter only)         |
| <b>Login Security</b>                             |  |
| Web Browser Access (Ethernet)                     | 1 Web password Read Only; 1 Web password Read/Write  |
| Terminal Emulation Access                         | None   |
| <b>Maximum Number of units/modules/nodes</b>      | 32   |
| <b>Maximum Number of registers/OIDs/instances</b> | 1,024  |
| <b>Indicators</b>                                 |  |
| Network   | 1 Green/Red LED: Link/No Link; 1 Green Active (additional LEDs for Dual Port Protocol Converter)                   |
| EIA-485 Status                                    | 2 Green Transmit and Receive LEDs (additional LEDs for Dual Port Protocol Converter)                               |
| <b>Operating Environment</b>                      |  |
| Operating Temperature                             | 32°F to 122°F (0°C - 50°C)   |
| Humidity  | 5% to 95% RH (Non-condensing)  |
| Altitude  | 15,000 ft (4572m) max.   |
| <b>Storage Temperature</b>                        | -4°F to 185°F (-20°C - 85°C)   |
| <b>Mounting</b>                                   | Desktop or rack mount (brackets included)  |
| <b>Dimensions</b>                                 | 9.8"W x 5.3"D x 1.8"H (248mmW x 135mmD x 46mmH)  |
| <b>Weight</b>                                     | 2.32 lb. (1.05kg)  |
| <b>Certifications</b>                             | CE; ETL listed: conforms to UL STD 61010-1, EN STD 61010-1; certified to CSA C22.2 STD NO. 61010-1; RoHS compliant |

