

# REMOTE INFRASTRUCTURE MANAGEMENT (RIM) SYSTEM PROTOCOL CONVERTER

## KEY FEATURES

- Multiple input and output protocols allow easy integration with a wide variety of equipment
- Communicates with building management and network management systems
- Web-based interface simplifies setup and configuration
- Connects up to 32 devices (units, modules, or nodes)
- Monitors up to 1,024 Modbus registers, OID, or instances
- Use the dual port Protocol Converter to connect to multiple trunk lines for faster polling with a large number of devices
- Alarm notification through email when a device stops communicating

## APPLICATIONS

- Converts sensor output from facilities equipment between SNMP, BACnet and Modbus protocols for integration into a building management system (BMS) or a network management system (NMS)

## USE WITH

- CPI Remote Infrastructure Management (RIM-1000) System
- CPI Remote Infrastructure Management (RIM-750) System

## RELATED ACCESSORIES

- CPI Electronic Locking System (ELS)
- CPI Power Management Tool
- CPI eConnect® PDUs



60106-001 RIM Protocol Converter, Single Port



60106-002 RIM Protocol Converter, Dual Port

The Remote Infrastructure Management (RIM) System Protocol Converter from Chatsworth Products (CPI) provides system integration with facility monitoring and management systems. The RIM Protocol Converter converts sensor outputs in SNMP, BACnet and Modbus protocols into one or more of the same protocols for integration into a building management system (BMS) or network management system (NMS). The Protocol Converter is ideal for environments where data from monitored equipment is incompatible with the protocols used by the BMS or NMS, especially in applications that feature legacy monitoring systems.

Use RIM Protocol Converter to translate sensor output when your equipment uses one protocol and your BMS or NMS uses a different protocol. The RIM Protocol Converter accepts Modbus TCP/IP, Modbus RTU, SNMP integer data and BACnet/IP inputs and converts the input to BACnet/IP, Modbus TCP/IP, Modbus RTU or SNMP output. The Protocol Converter can attach to 32 devices and accepts and converts up to 1,024 inputs - this functionality allows a single Protocol Converter to flexibly integrate with multiple alarm and management systems. A built-in web-based interface allows easy setup and configuration. In addition to protocol conversion, the RIM Protocol Converter supports BACnet Change-Of-Value (COV), basic register write operation and can send email via your SMTP server if a monitored device stops communicating.

The RIM Protocol Converter is available in two models. Both models include a network connection. The single port Protocol Converter has one EIA-485 communications port. The dual port Protocol Converter has three EIA-485 communications ports for extended polling over multiple trunk lines. The dual port Protocol Converter is an excellent choice when monitoring a large number of physical inputs. Multiple ports will reduce the cycle time when polling equipment.

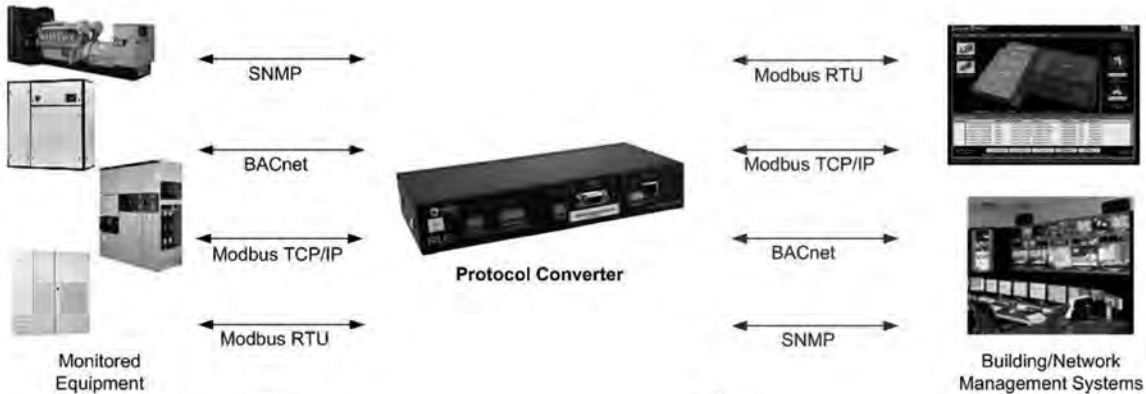
See inside for product details or contact CPI Technical Support for configuration assistance.

**SPECIFICATIONS**

- Includes:
  - 1 x Protocol Converter,
  - 1 x Power Supply,
  - 1 x network crossover cable for initial configuration
- Power: 24VAC @ 600mA max, 50/60Hz, 24VDC @ 600mA max. (Power supply included)
- Grounding: External ground point for chassis and EIA-485 ground
- Communication Ports:
  - 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 (Three total ports - Port 2 on Dual Port Converter is configurable for half- or full-duplex)
- Protocols:
  - TCP/IP; HTML, TFTP SNMP: V1; V2C MIB-2 compliant; NMS Manageable with Get
  - Modbus (EIA-485): Modbus Master/Slave; RTU mode; Supports Master codes 01, 02, 03, 04; Slave code 03
  - Modbus TCP/IP (UDP/IP): Modbus Master/Slave; TCP/IP transmission protocol
  - BACnet/IP: ASHRAE STD 135-2004 Annex J; Port 3 on Dual Port Protocol Converter is BACnet MS/TP capable (Slave only)
  - SMTP (email): Supports Client Authentication (plain an login); compatible with ESMTP Servers
  - Terminal Emulation (EIA-232): VT100 compatible (for configuration and diagnostics only)

- Protocols In:
  - SNMP
  - Modbus RTU
  - Modbus TCP/IP
  - Modbus RTU (EIA-485)
  - BACnet/IP
- Protocols Out:
  - SNMP
  - Modbus TCP/IP
  - Modbus RTU (EIA-485)
  - BACnet/IP
  - BACnet MS/TP (Port 3 of Dual Port Protocol Converter only)
- Login Security:
  - Web Browser Access (Ethernet): 1 Web password Read Only; 1 Web password Read/Write
  - Terminal Emulation Access: None
- Maximum Number of devices (units/modules/nodes): 32
- Maximum Number of registers/OIDs/instances: 1,024
- Indicators:
  - 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)
- Operating Environment:
  - Operating Temperature: 32°F to 122°F (0°C to 50°C)
  - Humidity: 5% to 95% RH (Non-condensing)
  - Altitude: 15,000 ft (4572m) max.
  - Storage Temperature: -4°F to 185°F (-20°C to 85°C)
- Mounting: Desktop or rack-mount (19" EIA rack-mount brackets included)
- Dimensions: 1.8"H x 9.8"W x 5.3"D (46 mm x 248 mm x 135 mm)
- Weight: 2.32 lb (1.05 kg)
- Certifications: CE; ETL listed: conforms to UL 61010-1, EN 61010-1; certified to CSA C22.2 NO. 61010-1; RoHS compliant

**INTEGRATION DIAGRAM**



**ORDERING INFORMATION**

Part Number	Description	Shipping Weight
60106-001	RIM Protocol Converter, SNMP/Modbus/BACnet, Single Port, Black	5 (2.3)
60106-002	RIM Protocol Converter, SNMP/Modbus/BACnet, Dual Port, Black	5 (2.3)

*Note: Includes 1 Protocol Converter, 1 external power supply and 1 network crossover cable for initial configuration.*