

ENVIRONMENTAL MONITORING & SECURITY SYSTEMS



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ENVIRONMENTAL MONITORING & SECURITY SYSTEMS

With all the attention given to virtual security threats, such as hacking and viruses, you do not want to be concerned about a security breach at the cabinet level as well. CPI's Environmental Monitoring and Security Systems offer an array of products that keep an eye on everything from temperature and moisture, to physical movement in the equipment room and unauthorized access to the cabinet door. Many of these products can also be directed into CPI's Remote Infrastructure Management (RIM) System, allowing much of your data center's security, safety and functionality to be monitored remotely at any time of day.

Remote Infrastructure Management

CPI's RIM System consists of a full line of appliances and sensors that provide continuous environmental, power and security monitoring in your data centers and equipment rooms. The RIM System allows for interconnectivity with building management systems and provides an integrated view of all facility equipment using a simple web interface.

The RIM-750 is perfect for monitoring a single cabinet or small equipment room, while the RIM-1000 is a scalable solution that allows you to monitor a row of high-density cabinets or small computer room, in addition to displaying information from other RIM-750s or RIM-1000s for a single, web-based, comprehensive view of multiple locations. The RIM Protocol Converter converts sensor output from facilities equipment between SNMP, BACnet and Modbus protocols for integration into a building management system or network management system.

- The RIM-750 System provides remote monitoring of environmental sensors for a single server cabinet or a small computer or telecommunications equipment room. Select from a full line of sensors for continuous environmental, power and security monitoring.
- The RIM-1000 System provides remote monitoring of sensors and devices in your data centers and equipment rooms. Select from a full line of sensors for continuous environmental, power and security monitoring.
- The RIM System Protocol Converter provides protocol translation to simplify equipment integration into facility monitoring and management systems. It is ideal for situations where data from monitored equipment is incompatible with the protocols used by the BMS or NMS, which is typically the case with legacy equipment or monitoring systems.

eConnect® Electronic Access Control (EAC) for Cabinets

CPI offers eConnect® Electronic Access Control (EAC), a networked locking solution that is integrated with CPI's eConnect interface. Used in combination with eConnect power distribution units (PDUs), EAC integrates sensors for lock and latch status, monitoring and alarm functions. Cabinet access is provided through smart cards. eConnect EAC is available for CPI GlobalFrame® or TeraFrame® cabinets. Contact Technical Support for additional information.



RIM-750



RIM-750
Rear View

Remote Infrastructure Management (RIM-750)

The RIM-750 is a compact appliance that has multiple inputs for monitoring a wide range of conditions. There are four inputs for temperature and temperature/humidity sensors, eight digital inputs for dry contact sensors, and a single input for leak detection. Use the digital inputs to monitor magnetic door sensors, motion sensors, a smoke detector, or summary alarms from other equipment. The leak detection connection supports a single zone with up to 200 feet (60 meters) of Sensor Rope. There is also a single relay output (NO/NC) that can be triggered manually or by the condition/status of an input.

RIM-750 has a simple, intuitive web based interface for easy setup and monitoring. The main dashboard displays all sensor conditions in a single view. RIM-750 also summarizes events and logs and displays temperature and humidity sensor data in a line graph on the main page, so you can see trends. For sensors and inputs, you select the alarm condition and how to respond to an alarm with a sound, light, email and/or by enabling the relay. For leak detection, you can also set sensitivity and monitor for both leak and cable break.

Features:

- Remote monitoring of sensors in computer and network equipment rooms
- Simple installation and setup
- Web-accessible with a clean, easy-to-use, mobile-friendly web interface that displays sensor readings and trends
- Monitors eight digital inputs and four temperature or temperature/humidity sensors, plus one zone of leak detection with up to 200 feet (60 meters) of Sensor Rope
- USB power inlet allows you to power RIM-750 with the included wall adapter or a USB port on a server or other device, such as the eConnect PDU
- Multiple alarm notification configurations, including audible and visible indicators, email messaging and/or relay activation
- Relay output allows for simple control of an external device upon alarm condition
- Modbus or SNMP output enables simple integration with other facility management systems (BMS)
- Integrated logging and trending, including CSV downloadable trending data

Certifications:

- CE
- ETL listed: conforms to UL 61010-1, EN 61010-1
- Certified to CSA C22.2 NO. 61010-1
- RoHS compliant

Part Number	Description	Shipping Weight lb (kg)
60100-001	RIM-750, with 4 Temperature/Humidity inputs, 8 digital inputs, 1 leak detection input, 1 relay output, black	2 (0.9)
60100-002	RIM-750 and Leak Detection Kit Bundle, includes 1 RIM-750 with a Leak Detection Lead Cable and 200' (60 m) of Leak Detection Sensor Rope	9 (4.1)

Note: Leak Detection Lead Cable and Leak Detection Sensor Ropes can also be ordered separately.

Specifications:

- Includes:
 - (1) RIM-750, (1) network cable, 3.3 ft (1m) long, (1) USB power adapter with USB mini B to USB A cable
- Power:
 - Power with included wall adapter or from USB port with 5VDC @ 500mA max. output
 - USB mini-B power inlet, (US) 5VDC @ 500mA max.
 - Includes a 110/240VAC 50/60Hz wall adapter with US (type "A") outlet blade and type "C", "G" & "I" adapter blades
- Wired Inputs:
 - Temperature/Humidity: 4 each, 1-wire digital temperature or 1-wire digital temperature/humidity sensor inputs; plug-and-play; configurable alarm points
 - Digital: 8 each, digital alarm points; configurable
 - Leak Detection: 1 each, zone leak detection, supports 200 ft (60 m) of conductive fluid Sensor Rope; Leak Detection Lead Cable and Sensor Rope(s) must be ordered separately
- Relay Output:
 - 1 each, Form C summary relay; 2A @ 30VDC, 0.5A @125VAC; configurable as summary alarm output or manual operation
- Alarm Notification:
 - Panel: Audible alarm, visible LED
 - Integrated Web Interface: Dashboard overview with alarm indicators
 - Email: up to 8 email recipients; email sent on alarm to all recipients, distribution list, or email-to-SMS
 - SNMP Traps: Multiple community strings
 - Relay: 1 Form C summary relay output
- Web Interface Login Security:
 - 8 password read only, 8 password read/write
- Communication Port:
 - Ethernet: 10/100 BaseT, RJ45 connector; 500VAC RMS isolation; DHCP enabled; Static IP-addressable
- Protocols:
 - TCP/IP: ARP; DNS; UDP; DHCP; ICMP
 - HTML: Supports multiple simultaneous connections
 - SMTP (email): SMTP authentication; SMTP relay; supports SSL; up to 8 recipients
 - Modbus TCP/IP; Modbus slave; TCP/IP transmission protocol
 - SNMP: V1; V2C MIB-2 compliant; NMS manageable with Get and Traps; V2C Get, V2C and V1 Traps
 - NTP: Custom server settings
- Logging: Logs 50 most recent alarm and return to normal events with date/time stamp.
- Trending: Records up to 86,400 points of sensor data. Sample interval set from 1 second to 1 day. CSV downloadable.
- Operating Environment
 - Temperature: -40°F to 185°F (-40°C to 85°C)
 - Humidity: 0% to 100% RH, non-condensing
 - Altitude: 15,000ft (4,572m) max.
 - Storage Environment: -40°F to 185°F (-40°C to 85°C)
- Dimensions: 1.00"H x 5.63"W x 2.63"D (25mm x 143mmW x 67mmD)
- Weight: 10.1 oz. (287g)
- Mounting: Stand alone; keyholes included for wall mount; rack-mount bracket available



Rack-Mount Bracket

- Holds two RIM-750 units
- 1U x 19" EIA x 3"D (76 mm)
- Black Finish

Part Number	Description	Shipping Weight lb (kg)
60107-001	Rack-Mount Bracket, 1U x 19" EIA x 3"D (76 mm)	1 (0.5)

Part Number	Sensors for RIM-750	Shipping Weight lb (kg)
Temperature and Humidity Sensors		
60108-001	Temperature Sensor, RJ11, 25'L (7.6 m) cord	1 (0.5)
60108-002	Temperature and Humidity Sensor, RJ11, 25'L (7.6 m) cord	1 (0.5)
Digital Input, Sensors *		
60109-001	Leak Spot Detector, with 14'L (4.2 m) cable*	1 (0.5)
60110-001	Power Fail Monitor, with 120 VAC, 15A connection	1 (0.5)
60113-002	Smoke Detector, Power Supply included	2 (0.9)
60114-002	Motion Detector, Power Supply included	2 (0.9)
60115-001	Magnetic Door Sensor	1 (0.5)
Leak Detection, Sensors		
60116-001	Leak Detection Lead Cable, 15'L (4.57 m) and End of Line Terminator*	1 (0.5)
60109-003	Leak Detection Sensor Rope, 10 ft L (3.0 m)	1 (0.5)
60109-004	Leak Detection Sensor Rope, 25 ft L (7.6 m)	1 (0.5)
60109-005	Leak Detection Sensor Rope, 50 ft L (15.2 m)	3 (1.4)
60109-006	J-Clips, adhesive backing, to install Sensor Rope, Pack of 10	1 (0.5)
60109-007	J-Clips, adhesive backing, to install Sensor Rope, Pack of 50	1 (0.5)

Note: The RIM-750 has four connections for temperature and humidity sensors, eight connections for digital input sensor, and one built-in single-zone leak detection controller that supports up to 200 feet (60 m) of Sensor Rope, one Leak Detection Lead Cable is required to attach Sensor Rope(s) to the RIM-750. Connect Sensor Ropes end-to-end to extend length, as required. Do not exceed 200 feet (60 m).

Alternately, you can use up to four Leak Spot Detectors, which attach to one of the eight digital inputs on the RIM-750. When using a mix of Sensor Rope and Leak Spot Detectors, each Leak Spot Detector reduces the total footage of Sensor Rope supported by the built-in single-zone controller by 50 feet (15.2 m). For example, if you use two leak Spot Detectors, the RIM-750 will only support up to 100 feet (30 m) of Sensor Rope. Smoke Detector and Motion Sensor require an external power source (a VAC power supply is included).

Additional sensors available. Visit www.chatsworth.com



RIM-1000



RIM-1000
Rear View

Remote Infrastructure Management (RIM-1000)

The (RIM-1000) System from Chatsworth Products (CPI) provides remote monitoring of sensors and devices in your data centers and equipment rooms. RIM-1000 creates a critical early warning system that monitors conditions in your facility and notifies you when conditions change, so you can take immediate action. It also collects and stores sensor data for analysis to help you troubleshoot issues and optimize site conditions.

RIM-1000 supports analog sensor, digital sensor, Modbus, SNMP and BACnet/IP inputs for monitoring a wide range of site equipment and conditions. The basic model includes eight configurable inputs and two relay (NO/NC) outputs. The configurable inputs can be used to attach and monitor external analog (4-20mA) or digital (dry contact NO/NC) sensors. The basic model is expandable with your choice of additional input/output or input-only expansion cards. The 1U model supports one expansion card. The 2U model supports four expansion cards. A fully expanded 2U model supports up to 96 additional inputs or a mix of up to 48 additional inputs and 32 additional outputs. Additionally, the RIM-1000 can monitor up to 32 devices integrated through Modbus, SNMP or BACnet/IP (up to 1000 registers / OID's / Instances) collected from facilities equipment through the network or EIA-485 ports. For example with the RIM-1000 you can configure direct branch circuit monitoring (BCM) for current monitoring at the electrical panel board.

The web interface summarizes device and sensor input conditions with color-coding and displays the physical location of devices and sensors on a floor plan or map. Alarms and Event History are also summarized on separate tabs for easy review and acknowledgement. Logs can be manually downloaded for detailed review or archiving. In addition to monitoring sensors and devices, the webpage also provides links for up to 32 other slave devices including equipment or other RIM products and links for 10 additional IP addresses that can be used for viewing web cams or websites, so you can view all systems from a single RIM-1000 webpage. Alternately, RIM-1000 can provide Modbus, BACnet or SNMP output for integration with other facility management systems.

Select from several pre-configured models or add expansion cards as required to meet your specific requirements.

Features:

- Remote monitoring of sensors and devices in your data centers and equipment rooms
- Configurable with expansion cards for a large number of sensor inputs
- Provides one integrated view of all facility equipment
- Accepts inputs from a wide range of environmental sensors and facility equipment
- Stores data internally, so there is no need for additional equipment or software to store or access data
- Provides a single web-based interface for accessing and reviewing all data
- Monitors user-set thresholds and sends SNMP traps, email or SMS alarm notifications for events
- Provides Modbus, BACnet and SNMP output for integration with other facility management systems

Certifications:

- CE
- ETL listed: conforms to UL 61010A-1, EN 61010
- Certified to CAN/CSA C22.2 NO. 1010.1
- RoHS compliant

Specifications:

- Includes:
 - (1) RIM-1000; (1) Power Supply with 24VDC models only and (1) Rack-mount brackets
- Power:
 - 1U, 24VDC Model: 24VDC ($\pm 10\%$), 1A max., external power supply included
 - 1U, 48VDC Model: 36-72VDC, 0.5A max., power input terminal block
 - 2U, 24VDC Model: 24VDC ($\pm 10\%$), 2.5A max., external power supply included
 - 2U, 48VDC Model: 36-72VDC, 1.25A max., power input terminal block
- Grounding: External ground point for chassis and EIA-485
- Inputs:
 - Analog/Digital: 8 Configurable as 4-20mA (12-bit A/D conversion) or Dry Contact NO/NC ($<25\text{mA}$)
 - Keypad: Standard 3x4; 3000VAC RMS optically isolated; 20 User Access Codes (accessible via phone/DTMF through modem)
- Outputs:
 - Relay: 2 Dry Contact, Form C, 1A @ 24VDC, 0.5A resistive @ 120VAC (controllable via user programmable logic)
 - Sensor/Accessory Power: 24VDC ($\pm 10\%$) @ 300mA max. (power for external sensors and/or devices)
- Expansion Cards:
 - 1U model accommodates 1 expansion card
 - 2U model accommodates up to 4 expansion cards
 - 24VDC model requires 24VDC expansion cards
 - 48VDC model requires 48VDC expansion cards
 - Expansion Card A: 12 analog (jumper selectable for 4-20mA, 0-5VDC or 0-10VDC) or digital normally open (NO) dry contact inputs (non-isolated, individual ground only); and 8 Form C Relay Outputs, 1A @ 24VDC, 0.5A resistive @ 120VAC. 48VDC model accepts only 1 Card A.
 - Expansion Card C: 24 digital normally open or normally closed dry contact inputs, 3000VAC RMS optically isolated (common or individual ground)
- Communication Ports:
 - Ethernet: 10/100BaseT, RJ45 connector; 500VAC RMS isolation
 - RS-232: DB9 female connector; 9600 baud; 3000VAC RMS optically isolated; 15kV ESD protection
 - EIA-485 (selectable as RS-232): Two-wire half duplex; terminal block (selecting RS-232 switches to DB9 male connector); 1200, 2400, or 9600 baud configurable; 3000VAC RMS optically isolated 3000VAC RMS optically isolated
 - Modem (RJ11 Telco; ordered separately): V.34bis/33.6 kbps; DTMF capable; PPP-enabled; FCC Part 68 approved; 1500VAC RMS isolation barrier; 2100V peak surge protection
- Protocols:
 - TCP/IP; UDP/IP; ICMP/IP; FTP; NTP; IPv4
 - HTTP/HTML; SNMP; Telnet: 1.1/4.0; up to 10 URL links to other IP addressable cameras/devices; Webpages comply with Rehabilitation Act of 1973, sections 504 and 508, US Dept. of Education
 - SNMP: V1: MIB-2 compliant; NMS Manageable with Get, Set, and Traps; V2c: Traps or Informs
 - SMTP (email): Supports Client Authentication (plain and login); compatible with ESMTTP Servers
 - Modbus: RTU transmission protocol; function codes: Slave - 03; Master - 01, 02, 03, 04
- Protocols:
 - Modbus/IP: Modbus Slave; TCP/IP transmission protocol; Reads up to 628 registers and converts to SNMP and BACnet
 - BACnet/IP: Reads up to 106 instances and converts to SNMP and Modbus
 - Terminal Emulation: VT100 compatible
 - TAP (Pager): Telocator Alphanumeric Protocol v1.8
- Alarm Notification
 - Pager (With Optional Modem) – Optional: 15 text, numeric, or alphanumeric pager numbers
 - Email (Ethernet, With Optional Modem through PPP): 8 email recipients; email sent on Alarm and Return To Normal
 - SNMP Traps (Ethernet): V1 and V2c: 4 Trap IPs/Community Strings
 - Escalation (with Optional Modem): Additional notification to 1 of the 15 pager numbers when the initial page results in a Failure To Acknowledge status
- Health Check/Self-Monitoring: Self resetting; captured in Log
- Internal Hardware:
 - Real Time Clock: Battery backed; ± 1.53 min/month accuracy
 - Memory: 16MB RAM; 128K NVRAM; 16MB Flash
- Logging Capabilities:
 - Alarm Log: Last 256 Alarms
 - Event Log: Last 100 Events
 - Web User Access Log: Last 100 HTML Accesses
 - Digital Status Log: Last 100 Digital Status entries
 - Trending of Analog Inputs: 244 entries per time frame, per channel. High, low, and average values logged
 - Extended Trending (Analog Inputs): 3,840 entries over 32 inputs, physical or over Modbus. Logging at defined, user-selectable intervals.
- Login Security:
 - Web Browser Access (Ethernet, Modem, PPP): 1 Administrator plus 7 users
 - Terminal Emulation Access (Modem): 1 Administrator
- Front Panel Interface: 1 on/off power switch. Red and green LEDs indicate status, network link, network and modem activity
- Operating/Storage Environment:
 - Operating temperature: 32° to 158°F (0° to 70°C).
 - Humidity: 5% to 95% RH, non-condensing.
 - Altitude: 15,000ft (4,572m) max.
 - Storage temperature: -40° to 185°F (-40°C to 85°C)
- Dimensions and Weight:
 - 1U model: 1.8" H x 16.8" W x 7.9" D (46mm H x 427mm W x 201mm D); 6 lb (2.72 kg)
 - 2U model: 3.5" H x 16.8" W x 7.9" D (89mm H x 427mm W x 201mm D); 10 lb (4.54 kg)
- Mounting: 19" EIA, rack-mount brackets included; wall mount brackets available (sold separately)

Part Number	(RIM-1000) System – 24 VDC Models (Rack Space, Input Power, Inputs, Outputs, Expansion Cards)	Shipping Weight lb (kg)
60101-001	1U, 24VDC, 8 configurable analog or digital NO/NC inputs, 2 relay outputs, 1 open expansion card slot, black	11 (5.0)
60101-002	1U, 24VDC, 8 configurable analog or digital NO/NC inputs, 12 configurable analog or digital NO inputs*, 10 relay outputs, no open expansion card slots, black	11 (5.0)
60101-003	1U, 24VDC, 8 configurable analog or digital NO/NC inputs, 24 digital NO/NC input, 2 relay outputs, no open expansion card slots, black	11 (5.0)
60101-004	2U, 24VDC, 8 configurable analog or digital NO/NC inputs, 2 relay outputs, 4 open expansion card slots, black	16 (7.3)
60101-005	2U, 24VDC, 8 configurable analog or digital NO/NC inputs, 12 configurable analog or digital NO inputs*, 10 relay outputs, 3 open expansion card slots, black	16 (7.3)
60101-006	2U, 24VDC, 8 configurable analog or digital NO/NC inputs, 24 digital NO/NC inputs, 2 relay outputs, 3 open expansion card slots, black	16 (7.3)
60101-007	2U, 24VDC, 8 configurable analog or digital NO/NC inputs, 12 configurable analog or digital NO inputs*, 24 digital NO/NC inputs, 10 relay outputs, 2 open expansion card slots, black	16 (7.3)
60101-008	2U, 24VDC, 8 configurable analog or digital NO/NC inputs, 24 configurable analog or digital NO inputs*, 18 relay outputs, 2 open expansion card slots, black	16 (7.3)
60101-009	2U, 24VDC, 8 configurable analog or digital NO/NC inputs, 48 digital NO/NC inputs, 2 relay outputs, 2 open expansion card slots, black	16 (7.3)
60101-010	2U, 24VDC, 8 configurable analog or digital NO/NC inputs, 48 configurable analog or digital NO inputs*, 34 relay outputs, no open expansion card slots, black	16 (7.3)
60101-011	2U, 24VDC, 8 configurable analog or digital NO/NC inputs, 96 digital NO/NC inputs, 2 relay outputs, no open expansion card slots, black	16 (7.3)
60101-012	2U, 24VDC, 8 configurable analog or digital NO/NC inputs, 12 configurable analog or digital NO inputs*, 72 digital NO/NC inputs, 10 relay outputs, no open expansion card slots, black	16 (7.3)

Note: The 12/24/48 configurable analog or digital NO inputs in these models are configured for a 4-20mA input, but can be manually reconfigured to 0-5 VDC or 0-10 VDC inputs by changing jumper settings on the expansion card. 48 VDC Models are also available. Refer to the Technical Data Sheet for detailed specifications.*

You can add expansion cards to the RIM-1000 to provide additional connections for external sensors and additional relay outputs. When selecting an expansion card, check your RIM-1000 to be sure there is an open expansion card slot and be sure to match the input voltage of your RIM-1000 (24 VDC or 48 VDC).

Expansion Cards for RIM-1000 System		
Part Number	Description	Shipping Weight lb (kg)
60103-001	Expansion Card A, for 24 VDC or 48VDC RIM-1000, 12 configurable analog or digital NO inputs*, 8 relay outputs (maximum one can be installed in a 48 VDC RIM-1000)	1 (0.5)
60103-002	Expansion Card C, for 24 VDC RIM-1000, 24 digital NO/NC inputs	1 (0.5)

Note: 1U units have 1 expansion card slot. 2U units have 4 expansion card slots. An internal modem (for pager and PPP/dialup connections), and wall mount brackets are also available.

Part Number	Analog Input, Sensors for RIM-1000	Shipping Weight lb (kg)
60111-001	Temperature Sensor, No Display, 50°F to 95°F (10°C to 35°C)	1 (0.5)
60111-002	Temperature Sensor, With Display, Selectable Range 50°F to 95°F (10°C to 35°C) or 32°F to 122°F (0°C to 50°C)	1 (0.5)
60111-003	Humidity Sensor, No Display, 2% Accuracy RH	1 (0.5)
60111-004	Temperature and Humidity Sensor, No Display, 2% Accuracy RH, Selectable Temperature Range 50°F to 95°F (10°C to 35°C) or 32°F to 122°F (0°C to 50°C)	1 (0.5)
60111-005	Temperature and Humidity Sensor, With Display, 2% Accuracy RH Selectable Temperature Range 50°F to 95°F (10°C to 35°C) or 32°F to 122°F (0°C to 50°C)	1 (0.5)
60111-006	Temperature and Humidity Sensor, No Display, 3% Accuracy RH, Selectable Temperature Range -20°F to 140°F (-28.9°C to 60°C); 0°F to 100°F (-17.8°C to 37.8°C); 40°F to 90°F (4.4°C to 32.3°C); or -4°F to 140°F (-20°C to 60°C),	1 (0.5)
60111-007	Temperature and Humidity Sensor, With Display, 3% Accuracy RH, Selectable Temperature Range -20°F to 140°F (-28.9°C to 60°C); 0°F to 100°F (-17.8°C to 37.8°C); 40°F to 90°F (4.4°C to 32.3°C); or -4°F to 140°F (-20°C to 60°C),	1 (0.5)
60112-001	Temperature Sensor, Miniature, 40°F to 100°F (4°C to 38°C) Range, with 18'L (450 mm) Lead Cable	1 (0.5)
60112-002	Temperature Sensor, Miniature, 40°F to 100°F (4°C to 38°C) Range, with 5'L (1.5 m) Lead Cable	1 (0.5)
60112-003	Temperature Sensor, Miniature, 40°F to 100°F (4°C to 38°C) Range, with 25'L (4.5 m) Lead Cable	1 (0.5)
Digital Input , Sensors for RIM-1000		
60109-001	Leak Spot Detector, with 14'L (4.2 m) cable	1 (0.5)
60109-002	Leak Detection Controller Kit, 10 ft (3 m) Sensor Rope, Power Supply	1 (0.5)
60109-003	Leak Detection Sensor Rope, 10 ft L (3.0 m)	1 (0.5)
60109-004	Leak Detection Sensor Rope, 25 ft L (7.6 m)	1 (0.5)
60109-005	Leak Detection Sensor Rope, 50 ft L (15.2 m)	3 (1.4)
60109-006	J-Clips, adhesive backing, to install Sensor Rope, Pack of 10	1 (0.5)
60109-007	J-Clips, adhesive backing, to install Sensor Rope, Pack of 50	1 (0.5)
60110-001	Power Fail Monitor, with one 120 VAC, 15A (NEMA 5-15P) connection	1 (0.5)
60113-001	Smoke Detector	1 (0.5)
60114-001	Motion Sensor	1 (0.5)
60115-001	Magnetic Door Sensor	1 (0.5)

Note: Each combination Temperature and Humidity Sensor uses two Analog Inputs on the RIM-1000, one for temperature and one for humidity. Use Leak Spot Detector to monitor a specific spot for liquid. Use Leak Detection Controller Kit and additional Sensor Rope, if needed, to monitor an area. Leak Detection Controller Kit uses two digital inputs on the RIM-1000, one for leak detection and one for cable break. Sensors require power from the RIM-1000 or another power source. Refer to the Data Sheet for sensor specifications.

Additional sensors available. Visit www.chatsworth.com



60106-001
Single Port



60106-002
Dual Port

Remote Infrastructure Management (RIM) Protocol Converter

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.

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

Part Number	Description	Shipping Weight lb (kg)
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 cabler for initial configuration.



eConnect Electronic Access Control

Address the physical security and prevention of unauthorized access to your cabinet. eConnect Electronic Access Control (EAC) is a front and rear single-factor lock solution that is activated by a smart card and fully integrates into networked eConnect power distribution units PDUs, so that no additional appliance or external software are required. Available on vertical Monitored, Monitored Pro, Switched and Switched Pro PDUs.

Part Number	Description	Shipping Weight lb (kg)
36650-001	eConnect EAC Smart Card Kit	3 (1.4)
36652-001	eConnect EAC Side Panel Switch Kit	1 (0.5)
36653-001	RF IDeas Smart Card Reader	1 (0.5)
36654-001	eConnect EAC SmartCards	1 (0.5)