## **UPC** Unitary Protocol Converter

The UPC (Unitary Protocol Converter) sets a new standard for single equipment protocol conversion. It can convert between two open protocols for instance from Modbus to BACnet, or from a proprietary protocol to an open protocol, to allow for integration with virtually any Building Automation System. One of the unique things about the UPC is the ability to select the open protocol you want to use for interfacing with the BAS (building automation system) with the simple flip of a DIP switch. Choose from BACnet, Modbus, N2 Bus, or LonWorks. The other port is configured through software to connect to one third-party device using any of the supported protocols.

### **Key Features and Benefits**

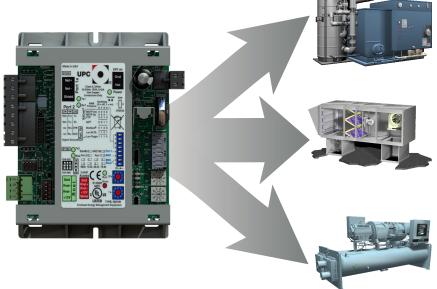
#### Performance / Hardware

- Built-in protocol support: BACnet (ARC156, MS/TP, and PTP), Modbus (RTU and ASCII), N2, and LonWorks
- DIP switch configuration and selection of the built-in protocols
- Custom-programmable using our powerful Eikon graphic programming tool. Eikon allows you to create graphic logic sequences for your application, which can be fully simulated off-line (with Eikon's simulation tool), and graphically viewable live on your equipment using Live Logic in WebCTRL® for OEMs or Field Assistant.
- Built-in support for OEMCtrl's Equipment Touch line of touchscreen displays
- Supports OEMCtrl's line of communicating ZS sensors
- Provides local laptop computer access port

#### **UPC**







# **Specifications**

Power	24 Vac / 24 Vdc ±10%, 50-60 Hz, 10 VA, single Class 2 source only
Operating Range	20° to 140°F (-29° to 60°C); 10 to 95% relative humidity, non-condensing
Universal Inputs (6) (Software selectable)	6 Universal Inputs electronically configurable to any of the following types: Dry   Pulse Counting  Thermistor   0-10 Vdc @ 20mA
	24VDC auxiliary sensor power (2): 24Vdc @ 100mA total current capacity
Communication Ports  BACnet	<b>Port 1a</b> : Jumper-configurable for ARC156 or EIA-485 communication. In ARCNET mode, the port speaks BACnet (at 156k bps). In EIA-485 mode, the communication protocol and baud rate desired are DIP switch selectable between BACnet MS/TP, Modbus RTU, or N2
Modbus N2	<b>Port 2</b> : Jumper configurable for EIA-485 mode or EIA-232. Supports communication protocols BACnet MS/TP, BACnet PTP, Modbus (RTU or ASCII), N2, or LonWorks (through an SLTA)
Lonworks	<b>Lon Option Port</b> : LonWorks Option Card for connection to Free Topology LON networks (TP/FT-10 Channel)
	RNET: ZS Communicating sensors or computer local access connection
Status Indication	Visual (LED) status of power, network communication, running, and errors
Protection	Built-in surge transient protection circuitry. Controller protected by internal solid state polyswitches on incoming power and network connections. Polyswitches do not need to be replaced, as they will reset themselves once the condition that caused them to "trip" returns to normal.
Battery	Battery CR123A has a life of 10 years with 720 hours of cumulative power outage
Compliance/Listing  ASSERTING  AS	BACnet: Conforms to the BACnet Advanced Application Controller (B-AAC) Standard Device, as defined in BACnet 135-2001 2012 Annex L and tested to Protocol Revision 9  United States: FCC compliant to Title CFR47, Part 15, Subpart B, Class A; UL Listed, File E143900; CCN PAZX, UL 916, Energy Management Equipment; ANZ: RCM Mark AS/NZS 61000-6-3; Canada: UL Listed File E143900, CCN PAZX7, CAN/CSA C22.2 No. 205 Signal Equip., Industry Canada Compliant ICES-003, Class A; CE Mark Compliant with 2014/30/EU, and RoHS Compliant: 2015/863/EU; UKCA Mark compliant with Electromagnetic Compatibility Regulations 2016 – Gov.UK and RoHS for Electrical and Electronic Equipment 2012.
Physical	Screw mounting Minimum panel depth: 2.25 in. Rugged GE C2950 Cycoloy plastic

