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 with the simple flip of a DIP switch. Choose from BACnet, Modbus, N2 Bus, or LonWorks. The UPC also offers the ability to plug in an optional backlit LCD display/keypad to allow you to view any of the points in your system. All of this is offered at a price that won’t break the bank.

Key Features and Benefits

- 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 - the ultimate diagnostic tool
- Built-in support for OEMCtrl’s custom configurable keypad/display unit - BACview\(^6\) (4-line by 40 character per line display) or BACview\(^5\) (2-line by 16 character per line display). Up to 2 Keypad/display units can be mounted remotely
- Provides local laptop computer access port
- Supports direct modem access for remote diagnostics and configuration

Application
### Specifications

#### Power
- 24 Vac ± 10%, 50 to 60 Hz, 10 VA power consumption
- (16 VA with BACview attached)
- 26 Vdc (25 V min, 30 V max)
- Single Class 2 source only, 100 VA or less

#### Physical
- Rugged GE C2950 Cycoloy plastic.

#### Operating Range
- -20° to 140°F (-29° to 60°C); 10 to 95% relative humidity, non-condensing

#### Communication Ports
- **Port 1a:** 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
- **Port 2:** 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)
- **RNET:** Local laptop and/or BACview access port

#### Optional Card Port
- **LonWorks** Option Card for connection to Free Topology LON networks (TP/FT-10 Channel)

#### Status Indication
- Visual (LED) status of power, network communication, running, and errors

#### Battery
- Battery CR123A has a life of 10 years with 720 hours of cumulative power outage

#### 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.

#### Listed by
- FCC, UL, cUL, and CE listed