

Features and highlights

- Scalable**
 Order the VLX with expansion I/O modules (EXPs) to meet high I/O application requirements. Add capacity for up to 176 I/O points as systems grow. Each VLX hosts up to 8 EXPs, enabling a wide variety of I/O configurations.
- Interoperable**
 BACnet-compliant controller supports BACnet IP via Ethernet network and/or BACnet MS/TP network.



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- Versatile**
 EXPs offer a mix of universal 12-bit inputs, binary triac outputs, and analog outputs (0–10 VDC or 0–20 mA) targeted for complex applications. Hand-Off-Auto switches on all outputs allow for local, manual override.
- Interoperable**
 Integrated 10/100 Ethernet adapter or 76.8 Kbps MS/TP for BACnet internetwork connection. BACnet/IP capable.
- Reliable**
 EEPROM, flash ROM, batterybacked SRAM, CPU watchdog, 6-layer board design, and extensive noise filtering ensure data integrity.



The Alerton® VLX is the ideal solution for equipment control in applications that put a premium on versatility, reliability, and performance. The VLX is well suited for small building installations, large air handling units, motor control centers, or virtually any system with numerous, interdependent control points

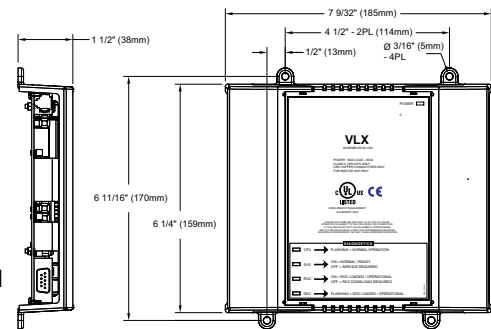
The VLX can communicate via both Ethernet and MS/TP—a low cost, twisted-pair bus connection configurable from 9.6 to 76.8 Kbps—and supports up to 10 BACnet MS/TP devices on its MS/TP trunk. It offers peer-to-peer DDC capability, allowing system-wide or global exchange data, and provides global DDC management for the BACnet devices on the MS/TP trunk. Modem support on a PTP port allows dial-up connectivity to the VLX, enabling remote management of the site.

The VLX accepts up to eight expansion modules (EXPs™) for equipment I/O. Mix and match EXPs for a virtually limitless selection of I/O configurations.

All operational status and control data are available as BACnet objects and properties, enabling interoperability with other site systems.

Technical data

- **Power** Unit requires 24 VAC, 50-60 Hz, 20 VA minimum. Half-wave rectified. EXPs and VLX can share unit power. Output loads powered separately.
- **Battery** Replaceable 3.0V lithium battery provides up to 1.5 years (cumulative) real-time clock and RAM backup. Standby battery life is 10 years. Duracell DL2450 or equivalent.
- **Processor & Memory** 16K EEPROM provides non-volatile, power-independent data storage. 2 MB static RAM provides reliable critical data storage. 32 MB dynamic RAM for program execution, and 2 MB flash ROM for nonvolatile program storage. 32-bit, high-integration Motorola CPU.
- **Real-time Clock** Onboard, battery-backed, real-time clock supports schedule operations, trendlogs, and timed automation functions.
- **EXP Modules** Supports up to 8 EXPs, which daisy chain using simple, twisted-pair communication cables.
- **BACnet Networks** Choose either Ethernet (recommended) or BACnet MS/TP (routing loops not supported). Integrated Ethernet adapter circuitry with RJ-45 jack for connection to 10Base-T (10 Mbps) or 100Base-TX (100 Mbps) networks.
- **BACnet Internet Protocol (IP)** Annex J BACnet/IP support for interoperability on wide area networks (WANs) and campus area networks (CANs). BBMD capability with up to 31 other BBMDs.
- **Max. Dimensions** 7.125" (182mm)H X 7.3125" (185mm)W X 1.50" (38mm)D.
- **Environmental** 32–131 deg. F (0–55 deg. C). 0–95% RH, non-condensing.
- **BACnet Conformance** B-AAC level device; tested and approved by BTL. See Protocol Implementation Conformance Statement (PICS).
- **Ratings**
Listed Underwriters Laboratories for Open Energy Management Equipment (PAZX) under the UL Standard for Safety 916
EMC Directive 89/336/EEC (European CE Mark)
FCC Part 15, Subpart J, Class A



- **Software**

Programming Interface: BACTalk operator workstation over BACnet Ethernet.

DDC: Direct digital controls (DDC) program executes locally every 0.5 second.

Schedules: Local capacity for 50 BACnet schedules.

Alarms: Up to 200 alarm setups stored locally as individually configurable BACnet event enrollment objects.

Trendlogs: Up to 200 trendlogs store data point histories for analysis.

Ordering information

Item number	Description
VLX	BACnet controller for smaller building projects

Specifications subject to change without notice