

Features and highlights

- **Capable**
Five 10-bit inputs and five binary outputs.
- **Interoperable**
BACnet-compliant on MS/TP LAN at up to 76.8 Kbps.



BACnet is a registered trademark of ASHRAE. ASHRAE does not endorse, approve or test products for compliance with ASHRAE standards. Compliance of listed products to requirements of ASHRAE Standard 155 is the responsibility of the BACnet Manufacturers Association (BMA). BTL is a registered trademark of the BMA.

- **Versatile**
Fully programmable for heat pumps, air-conditioning units, and general purpose control applications
- **Reliable**
Extensive on-board filtering, with all program data backed up in nonvolatile flash memory.
- **Fast**
Internal logic loop of 100 msec.



The Alerton® BACtalk® VLC-550 is a versatile, high-performance, BACnet-compliant field controller designed for heat pumps, AC units, and other terminal unit applications. As a native BACnet controller, the VLC-550 integrates seamlessly with your BACnet system. It communicates at up to 76.8 Kbps on a BACnet MS/TP LAN or can operate as a stand-alone controller.

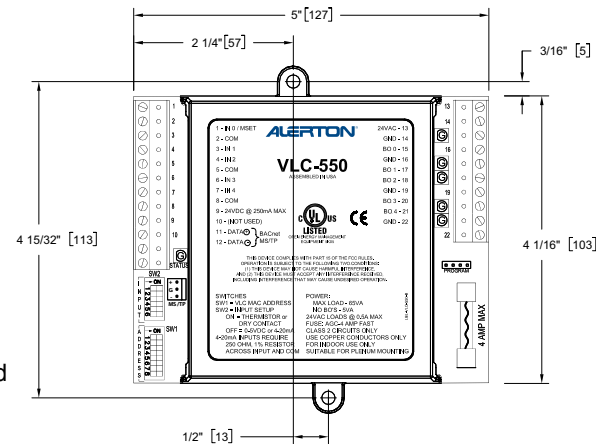
All VLC-550 control logic is programmed with Alerton's easy-to-learn graphical programming language, VisualLogic®. Programming and setup data is stored in nonvolatile flash memory, ensuring stable and reliable operation. The VLC-550 supports the Alerton Microset™ and Microset II intelligent wall sensors, which offer convenient data display, setpoint adjustment, and technician access to equipment setup parameters.

The VLC-550 is built for high-speed processing, with an internal logical loop time of 100 msec. Programmable timers also maintain a resolution of 100 msec.

High-resolution, 10-bit analog inputs are field-adjustable for thermistor/dry contact or 0–5 VDC/4–20 mA. For equipment monitoring, an on-board LED for each binary output indicates ON/OFF status, and a separate LED indicates communication activity on the MS/TP LAN.

Technical Data

- **Power** 24 VAC @ 5 VA min., plus binary output loads (65 VA max.). Utilizes a half-wave rectifier, which enables a single transformer to power multiple VLCs. One leg of 24 VAC connects to earth (panel) ground.
- **Inputs** 5 inputs with 10-bit resolution. Input 0 can be used for a BACtalk Microset. Inputs 1–4 are switch-selectable for thermistor/dry contact or 0–5 VDC/4–20 mA signals.
- **Binary Outputs** 5 outputs, each rated at 24 VAC, 0.5 A. The outputs utilize hot-switched triacs, which have a common connection to the fused 24 VAC supply.
- **24VDC Outputs** Up to 250 mA of 24VDC power is provided to power transducers or other devices.
- **Processor & Memory** Motorola AZ60 processor with on-board flash memory. Flash memory provides nonvolatile program and data storage, and allows for encrypted updates to the program for future product enhancements.
- **Max. Dimensions** 4.9" (125mm)H x 5.00" (127mm)W x 1.4" (36mm)D.
- **Terminations** Removable header-type screw terminals accept 14–24 AWG wire.
- **Environmental** 32–158 deg. F (0–70 deg. C). 0–95% RH, non-condensing.
- **Communications** BACnet MS/TP LAN up to 76.8 Kbps.
- **BACnet Conformance** An application specific controller (ASC); tested and approved by BTL. See Protocol Implementation Conformance Statement (PICS).
- **Ratings**
Listed Underwriters Laboratory 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



BACnet is a registered trademark of ASHRAE. ASHRAE does not endorse, approve or test products for compliance with ASHRAE standards. Compliance of listed products to requirements of ASHRAE Standard 135 is the responsibility of the BACnet Manufacturer Association (BMA). BTL is a registered trademark of the BMA.

Ordering information

Item number	Description
VLC-550	Field controller with 5 inputs and 5 binary outputs
VLC-550-C	VLC-550 field controller with available custom DDC

Specifications subject to change without notice