

VisualLogic™ Display (VLD)

Features and highlights

- **Capable**
Internal temperature and humidity sensors, 3 universal inputs, 6 binary outputs, 2 analog outputs, factory-loaded applications.
- **Interoperable**
BACnet-compliant on MS/TP LAN at up to 76.8 Kbps.
- **Versatile**
Fully DDC programmable, capable of standalone or integrated operation.
- **Flexible**
Fully programmable, configurable display, easy to locate wireless sensors.
- **Powerful**
Offers control of a second VLC using peer-to-peer commands. Modes of operation allow control based on occupancy or schedules.
- **Fast**
Internal DDC logic loop of 100 msec.
- **Visually appealing**
Based on industry standard platform, sleek sophisticated design with touch screen display.



Alerton's BACnet®-based VisualLogic® Display (VLD) is a communicating, intelligent sensor-controller combination with built-in temperature and humidity sensors that targets common controls applications such as roof top units, fan-coil units and heat pumps. It provides a cost-effective solution to meet in-room hotel requirements—an easy-to-use interface, easy-to-see digital display, and Celsius/Fahrenheit change over—where you already have Alerton systems in public or common areas. A versatile wireless addition provides door and occupancy sensor function. Direct digital control (DDC) enables powerful control of units, sophisticated, customizable displays, and a superb user interface. Pre-configured applications enable powerful control of units using a sophisticated user interface.

The VLD combines a configurable display and a VisualLogic controller, making it ideal for retrofits of thermostat installations and places where a single-piece combination is easier to install.

The VLD communicates over an MS/TP LAN so it operates as a fully-functioning BACnet controller and easily integrates with the building automation system. Alerton can also provide seamless integration with hotel reservation and check-in systems with the BCM-HOTEL.

Based on an established industry platform and a sleek, sophisticated design that millions of people have already installed in their own homes, the VLD is a single, cost competitive unit with a familiar and user-friendly interface, so it's an easy to use choice for your customers. The VLD is compatible with Alerton's wireless occupancy kit so you can offer a plug-and-play wireless solution for applications needing motion or door sensing, such as hotel rooms.

Technical Data

- **Power** 24VAC power from a UL Listed Class-2 24VAC transformer (not provided). The VLD uses a half-wave rectifier to convert the AC power supply to onboard power. This enables multiple devices with half-wave power supplies to be powered from a single, grounded transformer.

Min. Load = 17VA (all BOs OFF).

Max. Load = 89VA (all BOs ON).

If BO power jumper is not removed, then all BOs are powered from the controller's transformer.

Minimum load includes controller and analog outputs at full load (20mA into 500 Ohms).

All BOs are N.O. (Normally Open) contacts with a maximum switch rating of 24VAC @ 0.5A (12VA).

Maximum load assumes all 6 binary output loads are powered from the controller transformer and connected loads are the maximum allowed (24VAC @ 0.5A). Actual power requirements depend on connected loads.

- **Inputs** 3 universal inputs with 12-bit accuracy, providing controlled voltage, current and resistive modes.
- **Internal Sensors** 1 internal temperature sensor, 0–120 deg. F (-17.8–48.9 deg. C); 1 internal humidity, 5–95% RH, non-condensing.
- **Binary Outputs** 6 relay outputs; normally open contacts with a maximum switch rating of 24VAC @ 0.5A (12VA). BO-0, BO-2 and BO-5 are powered from the controller transformer. BO-1, BO-3 and BO-4 are powered from control transformer through removable jumper, allowing these BOs to be powered from a separate power source.
- **Universal Analog Outputs** 2 outputs with 12-bit resolution. Each auto-detects for 0–10VDC or 4–20mA. 4–20mA outputs are sourced by the VLD. Connected loads must return to the VLD ground. The VLD automatically switches from 0–10V mode to 4–20mA current mode when it detects a load value of less than 500 Ohms.
- **Processor & Memory** Powerful 32-bit processor with extensive flash memory and RAM resources. Flash memory provides nonvolatile program and data storage, and allows for encrypted updates to the program for future product enhancements.
- **Dimensions** 4.60" (117mm) H x 6.00" (152 mm) W x 1.20" (31mm) D including wallplate.
- **Terminations** A separate wallplate is provided and mounted to the wall; this wallplate provides screw terminal connections for all wiring. When the VLD is seated in the wallplate, all connections are made.
- **Environmental** Residential, commercial and light-industrial environments. 0–120 deg. F (-17–49 deg. C). 0–95% RH, non-condensing.
- **Communications** BACnet MS/TP LAN up to 76.8Kbps.
- **Ratings**
 - Listed Underwriters Laboratory for Open Energy Management Equipment (PAZX) under the UL Standard for Safety 916; listing includes both U.S. and Canadian certification
 - EMC Directive (European CE Mark).
 - FCC Part 15, Class B.