# REVOLUTIONIZING SMART BUILDINGS WITH VAV CONTROL
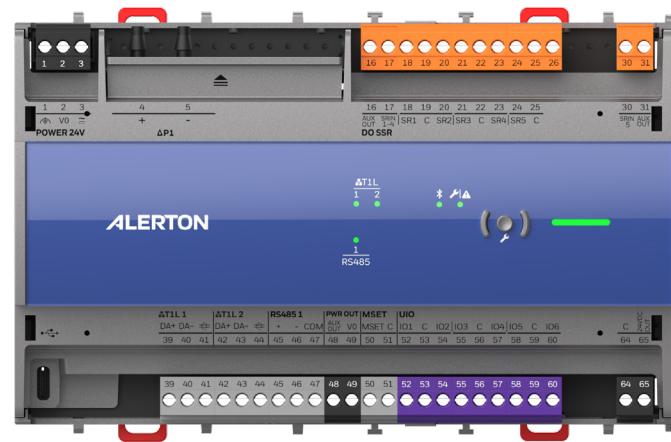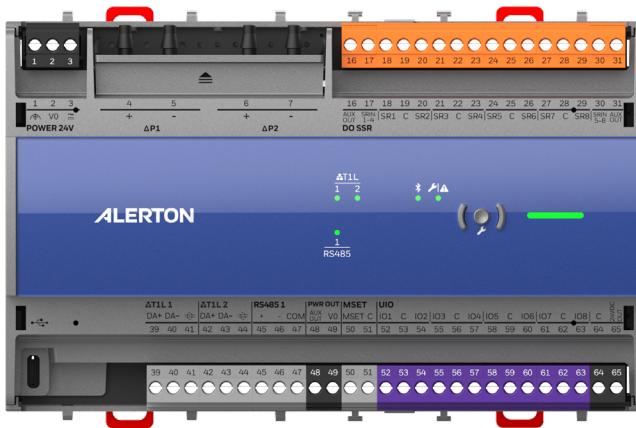
ALERTON MODULAR VAV CONTROLLERS

The Modular VAV Controllers empower facilities to achieve unparalleled airflow precision in the most critical environments. Designed for ultimate flexibility, our controllers facilitate pressure-independent control for both single and dual duct systems, ensuring consistent comfort and safety where it matters most.

ALERTON

ALERTON MODULAR VAV CONTROLLERS

The Alerton Modular VAV Controllers are designed to tackle the toughest challenges faced by building owners - offering unparalleled flexibility and customization by allowing installers to choose actuators that best fit their existing systems.

With our Modular VAV Controllers, you not only save time and costs with simpler installation and reduced commissioning efforts, but they also future-proof your investment, enabling high-speed actuators to operate seamlessly in demanding environments like hospitals and laboratories while ensuring precise temperature control for any application.

The new Alerton Modular VAV Controllers support BACnet (IP CAT5/6, IP T1L, & MS/TP) communication protocols, ensuring reliable connectivity and interoperability for a streamlined building management experience. With flexible Universal Input/Output (UIOs) and field-replaceable airflow sensors for quicker and easier maintenance - customize your system to fit the unique demands of your environment, all while benefiting from solid-state relays (SSRs) that enhance reliability. Powered by Alerton's VisualLogic® programming tool, you can tailor performance to your specific needs, ensuring optimal outcomes for your facility.

Plus, the optional integrated Bluetooth® Low Energy (BLE) capability transforms your setup process, allowing effortless pairing with the BMS Startup App for quick wiring validation and a hassle-free mobile VAV balancing experience using the Honeywell Connect Mobile App.

Modular VAV Controller – Single Duct
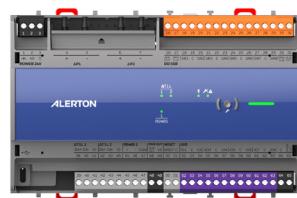
Modular VAV Controller – Dual Duct

FEATURES & BENEFITS

FLEXIBILITY BUILT-IN

Ideal for critical environment applications such as laboratory airflow tracking, critical patient rooms, operating rooms, and other applications requiring precise control of airflows.

– IP models support full duplex IPv4, IPv6 addressing, DHCP, SLAAC, and link local addressing modes

– Supports fail-safe daisy chains (IP T1L) over distance of up to 3,281 feet (1000 meters) at a standard speed of 10 Mbps, significantly higher than the standard CAT5/6 distances

– Connect via mobile apps – no need to access the ceiling, allowing you to leave the ladders on the truck
  - BMS Startup App: Device Pairing
  - Honeywell Connect Mobile App: Balancing

- Secure communication – Your OT network can be as secure as your IT network

- Fully and freely programmable – execute more complex calculations to meet the needs of demanding building systems sequences of operations such as ASHRAE Guideline 36

EASY TO COMMISSION

- Real-time clock with super capacitor circuit providing up to 24 hours of date/time retention

- 24 VAC/VDC at 300 mA auxiliary supply for field devices

- Up to 8 universal inputs/outputs (UIO) configurable as analog voltage/current output or as an analog/binary input.

- Field replaceable differential pressure sensor (± 500 Pa; accuracy +/- 3% of full range)

- Single Duct has 6 Universal Inputs/Outputs and 5 Solid State Relays, while Dual Duct has 8 Universal Inputs/Outputs and 6 Solid State Relays. UIOs are configurable as analog voltage/current output or as an analog/binary input

- Solid State Relays support 24 VAC/VDC voltage with 1.5 A continuous and 3.5 A inrush for 100 milliseconds per output

- Airflow sensor is factory calibrated at multiple velocity points –Minimum, maximum and reheat airflows can be entered using the Connect Mobile App (Airflow Calibration/ Balancing)

SIMPLE TO SERVICE

- Supports Alerton's BD9 DDC file format using Alerton's VisualLogic® – no secondary software needed.
  - All control logic is programmed using VisualLogic®
  - Controller can perform complex calculations, enabling it to efficiently handle advanced sequences of operations tailored to meet the evolving demands of modern building systems, all through the user-friendly VisualLogic® programming interface

- Color-coded and removable screw terminals to simplify wiring and replacement
  - Field-replaceable airflow sensors for quicker and easier maintenance

CONTROLLER PART NUMBER DESCRIPTION

PART NUMBER	PRESSURE SENSOR (SD/DD)	UNIVERSAL IO	SOLID STATE RELAY (SSR)	COMMUNICATION	MSET BUS	BLUETOOTH
VAV-SD6u5-IP	Single Duct	6	5	BACnet® IP CAT5/6	Yes	No
VAV-SD6u5-IP-BLE	Single Duct	6	5	BACnet® IP CAT5/6	Yes	Yes
VAV-SD6u5	Single Duct	6	5	BACnet® MS/TP	Yes	No
VAV-SD6u5-BLE	Single Duct	6	5	BACnet® MS/TP	Yes	Yes
VAV-SD6u5-T1L	Single Duct	6	5	BACnet® IP T1L	Yes	No
VAV-SD6u5-T1L-BLE	Single Duct	6	5	BACnet® IP T1L	Yes	Yes
VAV-DD8u8-IP	Dual Duct	8	8	BACnet® IP CAT5/6	Yes	No
VAV-DD8u8-IP-BLE	Dual Duct	8	8	BACnet® IP CAT5/6	Yes	Yes
VAV-DD8u8	Dual Duct	8	8	BACnet® MS/TP	Yes	No
VAV-DD8u8-BLE	Dual Duct	8	8	BACnet® MS/TP	Yes	Yes
VAV-DD8u8-T1L	Dual Duct	8	8	BACnet® IP T1L	Yes	No
VAV-DD8u8-T1L-BLE	Dual Duct	8	8	BACnet® IP T1L	Yes	Yes

ACCESSORIES/REPLACEMENT PARTS

PARAMETER	SPECIFICATION
SDPPF500PA	Replacement air flow sensor for use if the original sensor is damaged, or becomes inoperable. (Sold in pack of 2)
CW-COV-S-UNITARY	Terminal cover for the Small Unitary Controllers (sold in pack of 10)
SCRW-TB-UNI-L	Set of removable terminal blocks covering all models of Unitary Controllers
10BASE-T1L-ADAPT-0	BACnet® IP T1L single pair media adapter that allows converting 10BASE-T traffic to 10BASE-T1L (without power supply)

ALERTON

Smarter Buildings Start Here