

Pure and Simple Solutions



Low Cost DDC control system for heating, ventilating and makeup-air systems.



091121







LCD Human Machine Interface

- Easy to read, back-lit display with all necessary information for control and diagnostics available.
- Intuitive menu system for ease of navigation.
- View system faults in plain English format for ease of diagnostics.
- Edit set points and system configuration in real time.
- Manually selectable occupancy mode from HMI or BMS.
- Manually selectable heat or ventilation mode from HMI or BMS.

Unit Controller

- ARM Cortex M3 32 bit processor operating at 68 MHz.
- 1 MB non-volatile Flash for applications and 384 KB for applications.
- Operating temperature -40°F to 158°F.
- Up to 4 digital HMI's can be daisy-chained together for unit control.
- EnOcean wireless ready supporting up to 28 wireless devices.
- CE, FCC, UL (CDN & US), UL-864, CSFM, and CDC listed appliance.



UC-3 Lite

Standard Features

- Occupied and unoccupied temperature set points.
- Selectable operation mode.
- Space or discharge temperature control selectable at the HMI.
- Selectable cycle settings for occupied and unoccupied times.
- Simplified menu structure.
- Individual fault reporting for diagnostics.
- BMS connectivity via BACnet MS/TP.
- Mild weather heat lockout for energy efficiency.

Optional Features

- Filter monitoring with notification.
- Low temperature lockout alarm.
- Manually selectable VFD speed control for balancing.
- Manually selectable OA/RA damper positioning.

BMS Network Interface

- BACnet MS/TP connection included with every unit.
- Full system control via the included BACnet MS/TP connection.
- Will operate as a stand-alone system or in conjunction with a BMS.
- Standardized points list for ease of integration.
- Automatic network baud rate detection on power up.
- Occupancy, temperature, VFD speed and damper position commands from the network allow for unit averaging so multiple units can function under a single control.
- Modbus gateway friendly. Uses no 'null' values and keeps all network commands numeric.



Other AbsolutAire Control Solutions



Unified Control Systems

Allows multiple units in a common area or facility to operate as a system. Benefits include unified building pressure control, averaged space temperature control, scheduled purge or exhaust sequences, routine maintenance reminders and custom graphics for your facility. This option can be more cost effective than installing a full BMS system and has many of the same benefits.



Individual unit thermostat control

This control option allows each air-handling unit to operate as a stand-alone system. Temperature set points and on/off commands are entered at the thermostat. Scheduling can also be made available for occupied and unoccupied temperature set points to help reduce energy costs. This is a simple, cost effective way to control a makeup air unit.



Discrete I/O Controls

If an existing BMS has a local programmable logic controller or user interface panel with available inputs and outputs, these can be wired directly into the terminal strip on the AbsolutAire equipment. This option works well, but doesn't provide as much functionality as an AbsolutAire control package. Each function requires a separate set of wires to be run from the I/O module and some options will require the addition of control relays, sensors or temperature control hardware.



Owner-Specified Controls

When AbsolutAire equipment will be monitored and controlled by an existing BMS, owner-specified controllers may be required to match specific BMS operating requirements. In such cases, AbsolutAire will install the hardware, but the customer is responsible for programming and must provide an authorized DDC technician during our factory testing of the controls. Certain technical requirements also apply to meet the safety requirements and applicable ANSI standards. Full disclosure of customer responsibilities will be included in the equipment control specifications.

