UCS

# Unified Control System

Pure and Simple Solutions



Unified Control System with advanced features for heating, cooling, ventilating and makeup air systems.





# Unified Control System





#### Panel Mount Touch-Screen or PC Based Control

- Easy to navigate screens with easy to understand descriptions.
- Basic system information available at a glance with detailed control available.
- Intuitive menu system for ease of navigation.
- Context sensitive system faults in plain English format for ease of diagnostics.
- Edit set points and system configuration in real time.
- 7-day occupancy schedule with night setback and cycle control.

### System Platform

- Niagara 4 supervisor station on customer provided PC or DDC based.
- DDC processor 1GHz AM335x ARM Cortex A-8.
- DDC Memory 512 MB DDR3L and 4GB 8-bit MMC on-board flash.
- DDC Operating System Helixx with Niagara 4.
- HTML-5 Web Graphics with browser capability. No special software needed for operation.
- DDC MET C / US Listed. Approved: FCC 47CFR Parts 15B and 18, EN 55022, EN 55011, UCES-003, RoHS, UL 916, CSA C22.2 No. 205-17, EN 61010-1:2010, IEC 61010-1: 3<sup>rd</sup> edition.



# UCS

# Unified Control System

#### Standard Features

- Programmable 7-day schedule with programmable special events.
- Occupied and unoccupied temperature set points.
- Historical data for performance review.
- Unit maintenance reminders based on run-time.
- · Individual fault reporting for diagnostics.
- Individually customized for each facility.
- · HTML web graphics.

## Optional Features

- Multiple zones of control.
  - Control temperatures in different areas independently.
- Unified building pressure control capabilities.
  - Have all units work together or divide into different areas.
- Custom sequences tailored to individual facility needs.
  - Equalized unit run time with lead-lag control...
  - Custom exhaust control.
  - Customized cross-flow ventilation.
- · Send data to other networks.
- Different access levels for different users.
  - Each user responsible for their own area.
  - Restrict access to certain functions.
- Alarm Routing.
  - Alarms by zone on different user stations.
  - Email alarm notifications (requires internet access).



# 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.

