

O X Y G E N 8

CONTROLS

Powered by Distech

Who We Are

Oxygen8 is reinventing how buildings provide healthy and comfortable air in an energy efficient way. We work to enhance living and working environments with 100% fresh, filtered air using smart technology for maximum comfort and value.

[ox·y·gen·ate]

Nothing is more refreshing and essential to the human body than oxygen, which happens to be the eighth element in the periodic table. We oxygenate businesses, classrooms, senior care facilities and other buildings with 100% fresh air so people can work, live and breathe in a safe and comfortable environment.

Why We Do What We Do

To Create Healthy Indoor Environments

People are getting sick while working in offices, learning in classrooms and convalescing in senior care facilities. Traditional centralized HVAC systems that recirculate air without proper filtration and humidity control are the root cause of poor IAQ. To prevent the transmission of bacteria and viruses, improved HVAC systems must provide dedicated outdoor air and eliminate recirculation, have small zoned ventilation systems, include filtration, control humidity levels and used fixed-plate ERV technology that eliminates contaminant cross-over between outside and exhaust streams.

To Move Toward Building Electrification

To reduce greenhouse gases, many North American cities are moving toward net-zero energy buildings over the next decade, which will drive demand for all-electric HVAC systems and low energy technologies. We are here to meet that demand with our all-electric heating and cooling solutions.

For Better Building Design

Super-insulated buildings significantly reduce heating requirements, while climate change and developers' desires for large amounts of glazing will increase cooling needs. The integration of VRV with ERV helps to reduce energy consumption and meet ventilation requirements.

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Oxygen8 Controls by Distech

Debugging and Troubleshooting Tools

With algorithm coding owned by Oxygen8, we have the ability to debug live, make changes on the fly, and have faster response times for in-field issues.

Better Connectivity

Accessible wirelessly or by access point, our control interface is available on the web or in the palm of your hand on our new app. Powered by Microsoft Azure, the Oxygen8 IAQ dashboard brings together machine learning, AI, and custom integrations.

Unitouch thermostats support bluetooth connectivity. Control temperature setpoint and fan speed directly from your mobile device with the app!

Connect seamlessly to Daikin's D-Controller for Hot Gas Reheat applications, and W-Controller for VRV Integration.

Oxygen8's Distech Controller supports BACnet IP.

Commission from Mobile App

Mobile app for iOS and Android provides access to all necessary controls and parameters to commission a unit via a wifi link.

Customized & Powerful Interfaces

Oxygen8's platform allows for the creation of customized and branded visual interfaces that can be accessed via web or mobile internet browsers.

Fan motors are controlled via Modbus, which allows for more reliable control and data collection including (but not limited to) hours of operation, input power, current, and faults.

More Sensor Availability

In addition to standard CO2 sensors, Oxygen8 is proud to offer VOC and PM2.5 (or PM10) as optional IAQ sensors.



**DISTECH
CONTROLS™**

Control Capabilities



Fan Control

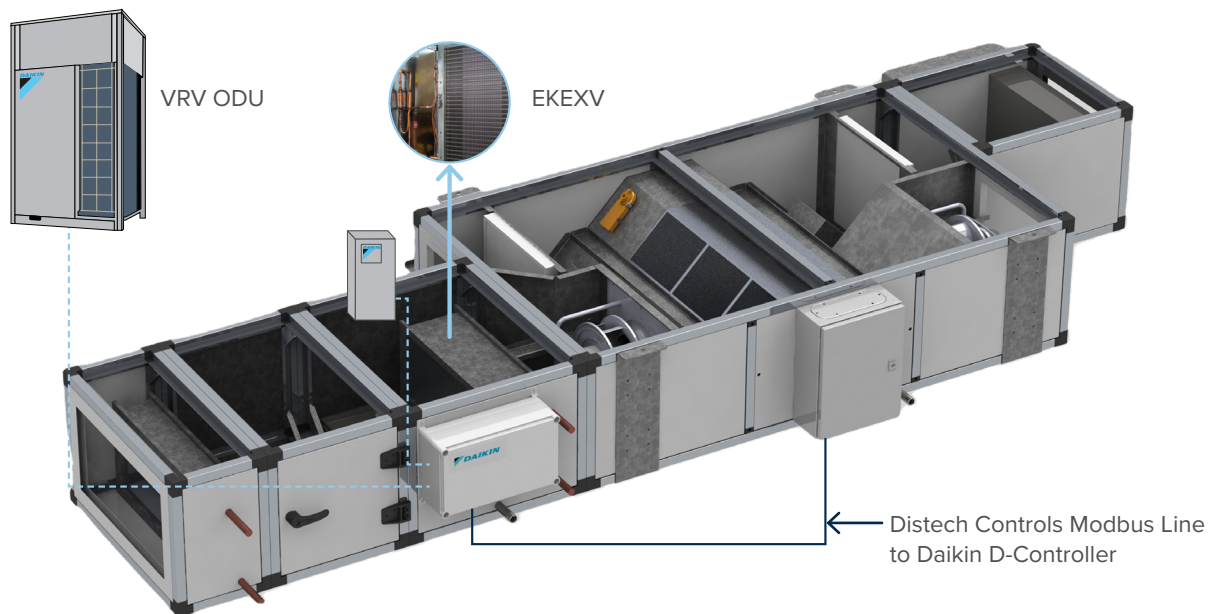
Constant Volume | Constant Pressure | Constant VOC/CO2



Temperature Control

Pre-Heat | Post-Heat | Cooling Coil | DX Coil | HGRH

VRV Integration



With Distech, Oxygen8's integrated DDC controls communicate directly with Daikin VRV W-Controllers (DX Applications) and D-Controllers (Hot Gas Reheat Applications).

For W-Controllers, Oxygen8 provides analog signals to modulate the temperature and mode control for the Outdoor Unit. Up to 3 W-Controllers are supported in parallel. In the case of the D-Controller, there is a direct Modbus link to the controller, to which Oxygen8 provides temperature and humidity targets. It is possible to integrate up to 4 D-Controllers on the Modbus link.

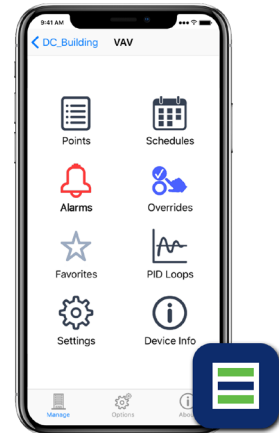
User Interfaces

myDC Control App

Free app from Distech available on iOS and Android

myDC Control offers connectivity from tablet or mobile phone to any controller within wifi range. The app offer the same displays and graphics as the HMI, plus performance graphs.

Note: myDC Control requires a wifi dongle.



UniTouch Room Device

Thermostat with a touch screen that displays temperature, fan speed, humidity (optional) and CO2 (optional) in the space, and allows for modification of the temperature setpoint and fan speed.

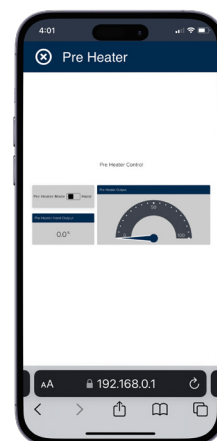


Distech HMI

On-wall display with a jog-dial and a button.



Web Interface



Distech Eclipse Web Interface

A customized and branded interface that can be accessed via web or mobile browser.

Standard Sensors



- 1 Dual Differential Pressure — Huba 699M**
Differential Pressure for Fans and Filters
- 2 Supply Air Temperature and Relative Humidity — Siemens QFM2150/MO**
Used to control post-heat, cooling, DX coil and HGRH

Optional Sensors



1 VOC/CO₂ Sensor — Siemens QPM2102/MO

Constant VOC or CO₂ control and data for IAQ Dashboard

2 PM2.5 or PM10 — Siemens QSM2100

Constant PM2.5 and data for IAQ Dashboard

3 Room Temperature, Relative Humidity, CO₂ — Distech SmartAir

Temperature, Humidity, and Constant CO₂ control and data for IAQ Dashboard

4 Room Temperature, Relative Humidity, CO₂ — Distech UniTouch

Temperature, Humidity, and Constant CO₂ control and data for IAQ Dashboard

5 Dual Differential Pressure — Huba 699M

Differential Pressure for Constant Pressure control or for core freeze protection

6 Optional Wireless Modbus — Lumen Radio W-Modbus

Allows wireless access to remote or hard to reach sensors (temperature, humidity, pressure, or CO₂) up to 500 meters of distance (line of sight).

BACnet CONFORMANCE CERTIFICATE



No. BTL-31033

WSPCert attests the conformance of the following BACnet implementation to the BACnet standard ISO 16484-5 protocol revision 1.15. The attested conformance refers to the BACnet Interoperability Building Blocks (BIBBs) listed on the BTL Listing bearing the above-mentioned BTL-number.

The BACnet implementation has fulfilled the requirements according to the test standard ISO 16484-6, the BTL Test Plan 18.1 and the BTL Testing Policies, see Test Report number TC51265 of Protocol Test Lab.

Product name (B-BC)
ECY Series
Model(s) ECY-303, ECY-303-M3, ECY-PTU-107, ECY-PTU-207, ECY-PTU-208, ECY-TU-203, ECY-S1000, ECY-S1000E, ECY-S1000-16, ECY-S1000E-16, ECY-S1000-48, ECY-S1000E-48, ECY-S1000-48-MS, ECY-S1000E-48-MS, ECY-VAV, ECY-VAV-POE
Firmware version
1.17.22026.602
Vendor
Distech Controls, Inc
4205 place de Java
Brossard, QC, Canada, J4Y 0C3

This certificate is valid until **31-Mar-2027**.

09-Jun-2023

Date of Initial Certification

Dipl.-Ing. G. Weinmann
Head of Certification Body

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