

# A Digitally Connected Sensor for Intelligent Spaces

## Application

The Onyxx Wall Module (OWM) is a configurable sensor for smarter buildings. As visually appealing as it is advanced in its application, the OWM is designed for ease of installation and dependability for multiple uses.

Engineered to accompany the JENEsys Edge® family of intelligent controllers, it accurately senses temperature and humidity. When communicating with a connected controller, it displays the sensed values, mode, time, controller status, and more. Change setpoints, control modes, perform overrides and signal the controller directly from the Onyxx Wall Module.

Use it to directly provide controlled variables and feedback from VAVs, Rooftop Units, Heat Pumps, Air Handlers, Terminal Units, other equipment, and their accessories.

# Interface & Physical Properties

The face of the enclosure is entirely glass with an embedded full-touch interface. The OWM features programmable touch operations such as in/out/up/down buttons, swipes, and exclusive levels of access.

The screen is backlit enabled using RGBW LEDs, housed

Onyxx® Wall Module

in a durable ABS plastic enclosure and mountable to a standard 4" x 2" electrical single gang box or anchored directly to the wall. An RJ-12 connector is flush with the back of the enclosure to allow for easy connection to a JENEsys Edge controller.

### **Features**

- Change Setpoints from Display
- Display Color Customization
- Made in the U.S.A.

The sensor is auto-discovered upon connection and requires no user interaction to auto-address within the JENEsys Edge controller and begin communicating when connecting a single OWM.

The JENEsys Edge controller services enable the Onyxx Wall Module menu system to be accessed using the soft-touch interface. Connect up to 4 OWMs to a single Edge device for multi-room command of indoor climate (manual discovery is required when connecting multiple OWMs to a single Edge device).

# **Ordering Information**

## Part Number Description

ONYXX-WM-T-RH-W White Onyxx Wall Module Temp/Humidity\*
ONYXX-WM-T-RH-B Black Onyxx Wall Module Temp/Humidity\*
ONYXX-WM-T-RH-W-CSE White OWM - Case of 18\*

ONYXX-WM-T-RH-B-CSE Black OWM - Case of 18\*



<sup>\*</sup> Mounting hardware included

## **Specifications**

#### Screen

LCD Display 2.4" TFT Transmissive, Normally Black, IPS

Resolution RGB 240 x 320
View Direction Full Range
Color Depth 65K

Touch

Capacitive Touch Panel Multi-Point and Gesture Capable

Active Touch Area Entire Glass Face

Sensors

Temperature Accuracy +/-0.2 °C over 0 °C - 60 °C span

Humidity Accuracy +/- 1.8 RH over 25-75% RH span. Full range +/- 3%

ALS Range 0.01 LUX to 83K Lux (auto ranging)

ALS Function Automatic LCD and Button Brightness Control

Power

Supply Voltage 15VDC +/- 10% Operating Current (MAX) 250mA

#### Communications

Network OWM CAN bus Controller Interface 6P6C RJ12

Interface Pinout 1-PWR (-), 2-NC, 3-LxH, 4-LxL, 5-NC, 6-PWR(+)

Wire Gauge 18-22 Gauge
Maximum Wire length 300 Feet
Wall Modules per Controller 4 Max

#### **Environment**

Min/Max Operating Temp  $-20 \,^{\circ}\text{C}$  to  $70 \,^{\circ}\text{C}$  /  $-4 \,^{\circ}\text{F}$  to  $158 \,^{\circ}\text{F}$  Suggested Operating Temp  $0 \,^{\circ}\text{C}$  to  $50 \,^{\circ}\text{C}$  /  $32 \,^{\circ}\text{F}$  to  $122 \,^{\circ}\text{F}$  Storage Temperature  $-30 \,^{\circ}\text{C}$  to  $80 \,^{\circ}\text{C}$  / $-22 \,^{\circ}\text{F}$  to  $176 \,^{\circ}\text{F}$  Relative Humidity Range  $5 - 95\% \, \text{RH}$ , non-condensing

#### **Enclosure**

Color and Material Black or White ABS

Dimensions 4"x 3"x 0.9"

Mounting 4"x 2" Electrical Box or Wall Anchors (#6 screws)

Weight

Module Weight 4.5 ounces

Certifications

Compliance Enclosure UL94V0

FCC Class B (Unintentional Radiator)

#### **Performance**

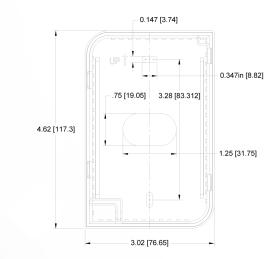
Memory 16MB Flash, 448kB ROM, 536kB SRAM

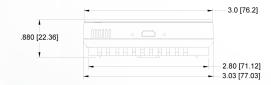
Operating Speed 250mHz

#### Loading & Reset

Mirco USB to Serial Bridge 1 Port

Recessed Buttons (2) 1 - Reset, 2 - Local Program Load









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