

03-HUB: Integrated Sensor Array

Description

The ceiling-mounted 03-HUB sensor array is part of the 03 room control system designed for the modern smart building. The sensor hub replaces multiple room sensors with a one-per-room competitive cost solution when installed together with an 03-DIN room controller.

The sensor hub provides occupant- and location-based control for the modern office or meeting space. Using the 03 mobile app, room occupants can select from a list of preconfigured settings or they can interact with the sensor hub directly to manage room comfort.



Application

The O3-HUB is ideal for a wide range of room applications, such as offices, conference rooms, classrooms and apartments, incorporating location-based services and mobile app interactions into the occupant experience.

Create a flexible room design with wireless devices using the built-in EnOcean® and Bluetooth® technology.

Features

- Combines humidity, composite temperature, passive infrared motion and light sensors in a single device
- ▶ Up to 8 sensor hubs per O3-DIN-CPU controller; up to 2 sensor hubs per O3-DIN-SRC controller
- ➤ Supports up to 32 EnOcean wireless input devices
- ► Bluetooth beacon broadcasts identifiers to Bluetooth-enabled smartphones with the O3 app installed
- ► Full color articulated LED ring provides silent indications to room occupant
- ► Audio tones provide user feedback

Specifications

Temperature Sensors

Composite temperature value ± 0.5 °C (± 1.0 °F) with calibration

Digital temperature sensor ±0.5°C (±1.0°F)

Infrared temperature sensor ± 1.0°C (± 1.8°F) typical

Humidity Sensor

Accuracy ±3% for 20% to 80% RH @ 15°C to 30°C (59°F to 86°F)

Motion Sensor

Passive infrared (PIR) motion sensor

Motion sensing range:

6.7 m (22 ft) diameter @ 3 m (10 ft) mounting height

5.5~m (18 ft) diameter @ 2.4 m (8 ft) mounting height

Audio Input

2 microphones for acoustic occupancy detection

Light Sensor

 \pm (6 + 5% reading) lx

LED Ring

Full color articulated with 12 RGB LEDs

Audio Output

1.0 W mono speaker for tones and audio output

Device Addressing

Rotary switch

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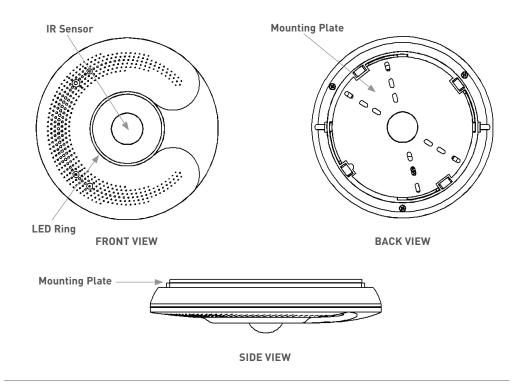
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Updated 13 December 2018_r



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Order an O3-DIN system base unit with one or more hubs or modules:

Base Units

03-DIN-CPU	CPU base unit: 3 network ports, 2 Ethernet ports, 3 power outputs, Modbus RTU, NFC
03-DIN-SRC	CPU base unit: 2 network ports, 2 Ethernet ports, 1 power output, Modbus RTU, NFC

Hubs and Modules

Sensor hub (temperature, humidity, light, motion, Bluetooth, LED ring, microphone and speaker) with mounting plate
Sensor hub (temperature, humidity, light, motion, Bluetooth, EnOcean 868 MHz, LED ring, microphone and speaker) with mounting plate
Sensor hub (temperature, humidity, light, motion, Bluetooth, EnOcean 902 MHz, LED ring, microphone and speaker) with mounting plate
FET I/O module: 4 universal I/O, 4 FET binary outputs
I/O module: 8 universal I/O, input (0–10 V, 0–5 V, 10K) or output (20 mA source, 10 mA sink)
Access module, single door support
DALI lighting module: DALI interface, 100 mA power output
Power over Ethernet module
Power injector module for 03 expansion
SMI module for motorized blinds: SMI interface, 30 mA power output

Specifications (Continued)

Connectors

Removable screw-type terminal connectors

Wiring Class

Class 2 / SELV

Power

24 VDC, 1 W typical, 7 W max, Class 2*
*Power can be supplied from an 03-DIN-CPU

Communications

EnOcean (868 MHz or 902 MHz)

Bluetooth Low Energy beacon (Version 4.2)

03BUS port (CAN-based)

IR transmitter

Ambient Rating

0°C to 45°C (32°F to 113°F) 10% to 95% RH (non-condensing)

Dimensions

180 × 41.5 mm (7.1 × 1.6 in.)

Weight

350 g (0.77 lb)

Compliance

CE

EAC

FCC/IC

Bluetooth FCC ID: XPYNINAB1 Bluetooth IC ID: 8595A-NINAB1 EnOcean 902 MHz FCC ID: ZV-STM300U EnOcean 902 MHz IC ID:

Listings

UL 916 Listed

713A-STM300U





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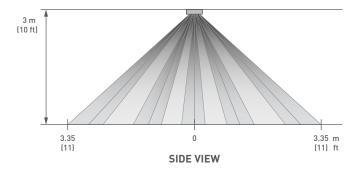
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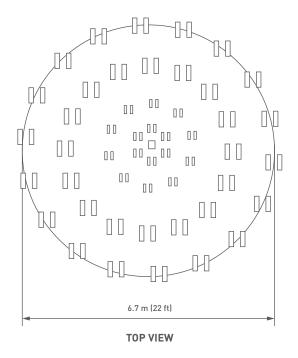
Power Supplies

DRC-24V30W1AZ	Chrome Line Voltage DC power supply 24 V 30 W Class A EMC	
DRC-24V60W1AZ	Chrome Line Voltage DC power supply 24 V 60 W Class A EMC	
DRC-24V100W1AZ	Chrome Line Voltage DC power supply 24 V 100 W Class A EMC	
DRS-24V30W1NZ	Sync Line Voltage DC power supply 24 V 30 W Class B EMC	
DRS-24V50W1NZ	Sync Line Voltage DC power supply 24 V 50 W Class B EMC	
DRS-24V100W1NZ	Sync Line Voltage DC power supply 24 V 100 W Class B EMC	

Passive Infrared Motion Coverage

Mounting Height	PIR Sensing Range
3 m (10 ft)	6.7 m (22 ft)
2.4 m (8 ft)	5.5 m (18 ft)





Subject to change without notice.

