

# ▶ 03™ Sensor Hub

## 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 03-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.

Models with I/O are ideal for controlling nearby lighting or for use in chilled beam applications.

Built-in EnOcean® and Bluetooth® technology allows for flexible room design with wireless devices.

### Features

- ▶ Combines humidity, composite temperature, passive infrared motion, and light sensors in a single device
- ▶ Up to 8 sensor hubs per 03-DIN-CPU controller; up to 2 sensor hubs per 03-DIN-SRC controller
- ▶ Supports up to 32 EnOcean wireless input devices
- ▶ Bluetooth beacon broadcasts identifiers to Bluetooth-enabled smartphones with the 03 app installed
- ▶ Full-color LED ring provides silent indications to room occupant
- ▶ Audio tones provide user feedback

### Specifications

#### Temperature Sensors

Composite temperature value  
 $\pm 0.5^{\circ}\text{C}$  ( $\pm 1.0^{\circ}\text{F}$ ) with calibration

Digital temperature sensor  
 $\pm 0.5^{\circ}\text{C}$  ( $\pm 1.0^{\circ}\text{F}$ )

Infrared temperature sensor  
 $\pm 1.0^{\circ}\text{C}$  ( $\pm 1.8^{\circ}\text{F}$ ) typical

#### Humidity Sensor

Accuracy  $\pm 3\%$  for 20% to 80% RH  
@  $15^{\circ}\text{C}$  to  $30^{\circ}\text{C}$  ( $59^{\circ}\text{F}$  to  $86^{\circ}\text{F}$ )

#### 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

#### Light Sensor

$\pm (6 + 5\%$  reading) lx

#### Audio Input

2 microphones for acoustic occupancy detection

#### LED Ring

Full color articulated with 12 RGB LEDs

#### Universal Points (2xP models only)

Up to 2 inputs (16-bit), software configurable for the following types:

0–5 VDC

0–10 VDC

10k thermistor

Dry contact (using 10k thermistor software setting)

4–20 mA (using external 250 ohm resistor on 0–5 V setting)

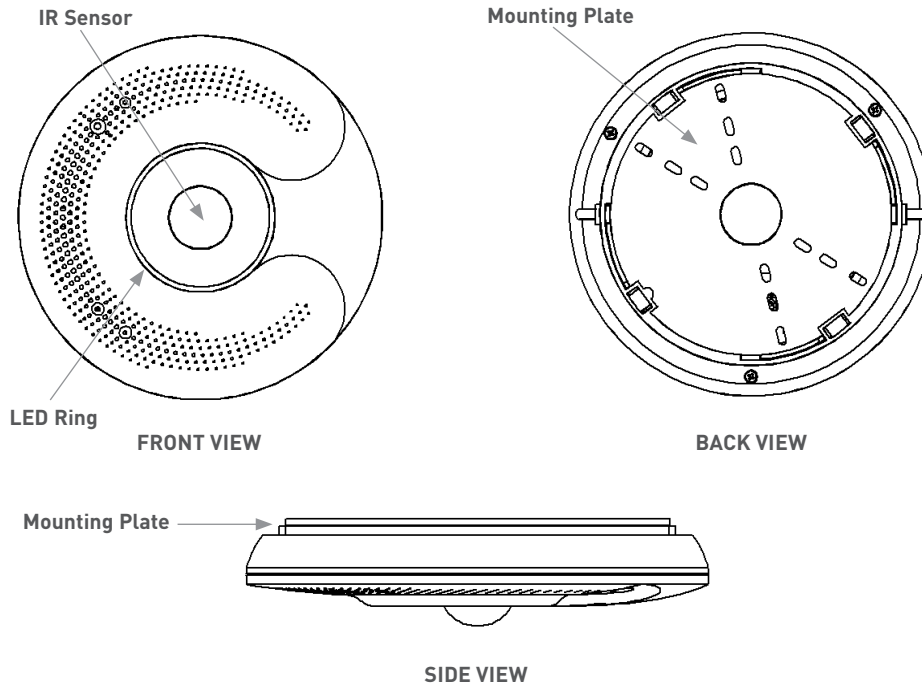
Up to 2 outputs (12-bit), software configurable for the following types:

0–10 V @ 20 mA max (sourcing)

1–10 V @ 10 mA max (sinking) for hardware rev 2.7 and higher

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Order an 03-DIN system base unit with one or more hubs or modules:

### Base Units

<b>03-DIN-CPU</b>	3 network ports, 2 Ethernet ports, 3 power outputs, Modbus RTU, NFC
<b>03-DIN-SRC</b>	2 network ports, 2 Ethernet ports, 1 power output, Modbus RTU, NFC

### Sensor Hubs

<b>03-HUB</b>	Sensor hub (temperature, humidity, light, motion, Bluetooth, LED ring, microphone and speaker) with mounting plate
<b>03-HUB-En868</b>	Sensor hub (temperature, humidity, light, motion, Bluetooth, EnOcean 868 MHz, LED ring, microphone and speaker) with mounting plate
<b>03-HUB-En902</b>	Sensor hub (temperature, humidity, light, motion, Bluetooth, EnOcean 902 MHz, LED ring, microphone and speaker) with mounting plate
<b>03-HUB-2xP (In Beta)</b>	Sensor hub (temperature, humidity, light, motion, Bluetooth, LED ring, microphone and speaker), 2 universal I/O, input (0–10 V, 0–5 V, 10k) or output (20 mA source, 10 mA sink), with mounting plate
<b>03-HUB-En868-2xP (In Beta)</b>	Sensor hub (temperature, humidity, light, motion, Bluetooth, EnOcean 868 MHz, LED ring, microphone and speaker), 2 universal I/O, input (0–10 V, 0–5 V, 10k) or output (20 mA source, 10 mA sink), with mounting plate
<b>03-HUB-En902-2xP (In Beta)</b>	Sensor hub (temperature, humidity, light, motion, Bluetooth, EnOcean 902 MHz, LED ring, microphone and speaker), 2 universal I/O, input (0–10 V, 0–5 V, 10k) or output (20 mA source, 10 mA sink), with mounting plate

### Specifications (Continued)

#### Audio Output

1.0 W mono speaker for tones and audio output

#### Device Addressing

Rotary switch

#### Connectors

Removable screw-type terminal connectors

#### Wiring Class

Class 2 / SELV

#### Power

24 VDC, 1 W typical, 7 W max (non-2xP) or 8 W max (2xP), Class 2\*

\*Power can be supplied from an 03-DIN controller

#### Communications

EnOcean (868 MHz or 902 MHz)  
Bluetooth Low Energy beacon (V4.2)  
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  
IC ID: 713A-STM300U

#### Listings

C-UL Listed  
UL 916 Listed

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# 03™ Sensor Hub

## 03-HUB: Integrated Sensor Array

### 03 Modules

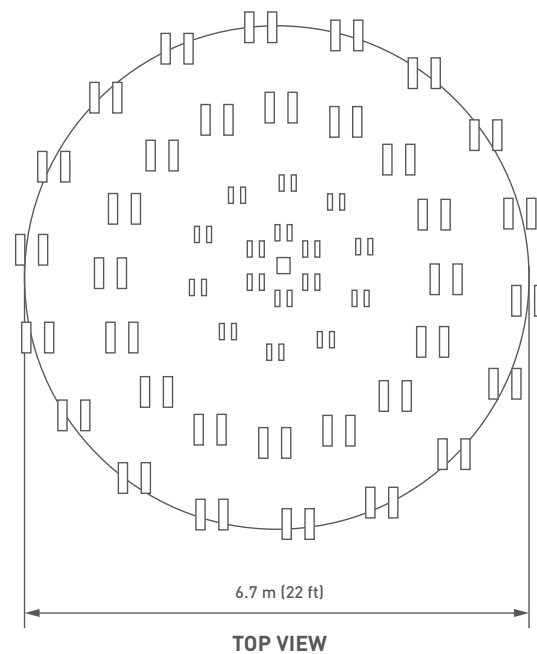
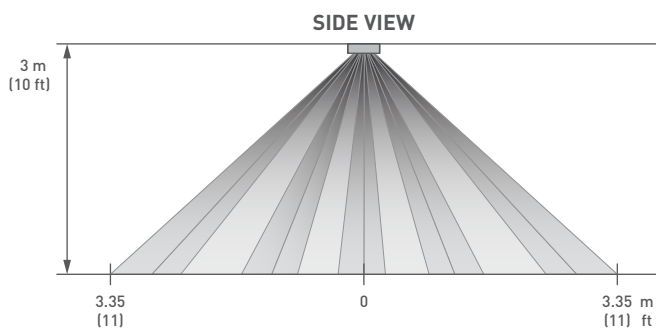
<b>03-DIN-4F4xP</b>	FET I/O module: 4 universal I/O, 4 FET binary outputs
<b>03-DIN-8xP</b>	I/O module: 8 universal I/O, input (0–10 V, 0–5 V, 10k) or output (20 mA source, 10 mA sink)
<b>03-DIN-ACCESS</b>	Access module, single door support
<b>03-DIN-DALI</b>	DALI lighting module: DALI interface, 100 mA power output
<b>03-DIN-PoE</b>	Power over Ethernet module
<b>03-DIN-PWRINJ</b>	Power injector expansion for 03
<b>03-DIN-SMI</b>	SMI module for motorized blinds: SMI interface, 30 mA power output

### Power Supplies

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