EOSCA / EOSCU / EOSCJ

EASYFIT
by EnOcean

Occupancy Sensor Ceiling Mounted

Saving energy without sacrificing comfort can be effortless with occupancy based controls. The Ceiling Mounted Occupancy Sensor enables a new level of energy saving control for rooms, hallways and other common areas. The Occupancy sensor uses radio frequency technology to communicate wirelessly with other EnOcean-enabled devices to set back temperature and turn off lights and electrical loads when a space has been unoccupied for a set period of time. Because the sensors are wireless there is no need to run additional wiring and installation can be completed in a matter of minutes. The sensor is self-powered by harvesting energy from indoor light, eliminating the need for periodic battery changes. The clean, contemporary styling makes it an attractive addition to any décor.

Features & Benefits

- **Self-powered.** Two integrated solar cells enable indoor light energy harvesting to power the device and eliminate the need for wires or batteries.

- PIR motion sensor with 360 degree viewing angle lens for maximum efficiency in different room settings.

- Two molded buttons with LED indicator lights can beused to link and configure the device.

- Internal tray accommodates supplemental coin cellbattery for use in low light environments.

Occupancy Sensor (Ceiling Mounted)

Specifications (typ. values)

Power Supply Optional	Indoor light energy harvesting Supplemental battery (CR2032) or 2-wire connector for external power or remote solar cell (3 - 5 VDC)
RF Communications	EnOcean 928 MHz, 902 MHz, 868 MHz
Transmission Range	80ft. (25m)
Motion Detection Range	34ft. (10m) diameter (refer to coverage diagrams)
Minimum Operating Light	50 lux (for auto-off only)
Startup Charge Times* (from empty)	First motion transmission / Linking=5 min @ 200 lux Motion LED blink Light/Walk Test Modes=1.5 hours @ 2000 lux
Note: Bright light or a battery can be temporarily used to significantly shorten startup charge times.	
Charge Time to Full	25 hrs @ 200 lux
Sustaining Charge Time	3 hours per 24 hours @ 200 lux
Motion Transmission Interval	2 minutes
Unoccupied Transmission	10 and 30 minutes since last motion detection
Heartbeat Transmission	default = disabled / enabled = 1 hr intervals
Environment Indoor use	14° to 104°F (-10° to 40°C), 20% to 95% relative humidity (non-condensing)
Operating Life in Darkness	80 hours (after full charge)

Optional Battery Life:
    Infrequent Bright Light
    Consistent Low Light
    Total Darkness
	Continuous battery-free operation standard
	20 yrs (with 200 lux for 2 hrs/day, 7 days/week)
	15 yrs (with 65 lux for 5 hrs/day, 7 days/week)
	6.5 yrs

EnOcean Equipment Profile (EEP)	A5-07-01
Dimensions	6.5" H x 2.36" W x 1.47" D (160mm x 60mm x 37mm)
Mounting Height	7 - 10 feet (2 - 3m) recommended
Agency Compliance	902 MHz: US: FCC SZV-STM300U CA: IC 5713A-STM300U 868 MHz: EU: CE and United Kingdom: UKCA 928 MHz: Japan: ARIB

Note: These products are offered solely as finished products for OEM customers. OEM customers must add their own markings for certifications and product identification where applicable.
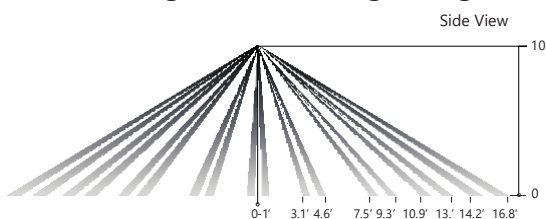
Sensor Range and Coverage Diagrams

Fig. 1: Side view of sensor coverage based on 10ft. mounting height
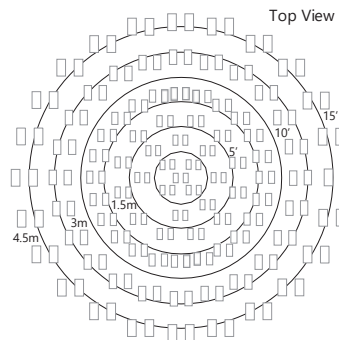

Fig. 2: Top view of sensor coverage based on 10ft. mounting height

Ordering information

Item Number	Item Description	Color
EOSCU-W-EO	Occupancy Sensor - Ceiling Mounted, 902 MHz	White
EOSCA-W-EO	Occupancy Sensor - Ceiling Mounted, 868 MHz	White
EOSCJ-W-EO	Occupancy Sensor - Ceiling Mounted, 928 MHz	White

Typical Applications

Self-powered wireless occupancy sensors are the perfect energy saving solution for any space where traffic patterns or occupancy determine the need to power the space. Install the occupancy sensors in guest rooms, living spaces, common areas or hallways and link them with a HVAC setback module, thermostat or in-line switch module to ensure that the HVAC, lights and other electronic loads are only on when they are needed.

Energy Harvesting Wireless

Enjoy unlimited flexibility and performance with EnOcean-enabled energy harvesting wireless solutions. Systems that employ this wireless device benefit from limitless supplies of energy and unrivaled flexibility.

* Specified lux values are for typical fluorescent lighting. Lux level requirements for LED and other types may vary. For lux unit reference, national standards often require a minimum of 300+ lux for office areas.

enocean®

1 International Wireless Standard
300 EnOcean Alliance Members
1000 Interoperable Products