



Type(s)
Project
Date
Notes

GENERAL INFORMATION

The ROS wall-mounted sensor that uses passive infrared (PIR) technology to detect occupancy. It uses wireless technology to communicate with Echoflex controllers to efficiently manage lighting and increase energy savings. The ROS sensor is not only easy to install and maintain, but also an affordable, reliable device for retrofit or new construction projects.

The sensor harvests solar energy from both natural and artificial light sources. Its efficient energy management system ensures continuous operation long after the lights are off, up to eight days in complete darkness. The ROS is suitable for vacancy applications where energy codes require lights to be manually turned ON and automatically shut OFF or dimmed when the space is vacant. Precision circuitry also allows it to provide immediate response to new occupancy states, making it an ideal solution for partial-ON/auto-ON applications.

The ROS incorporates test features that provide installers with the ability to ensure, sufficient energy harvesting, and occupancy detection without extra tools or software. Sensitivity settings for PIR can be adjusted to eliminate false tripping and ensure the right level of detection.

The ROS occupancy sensor is available in models for wide angle, corner mount, and hallway or high-bay end-of-aisle applications.

APPLICATIONS

- Education: Classrooms, administration, corridors, cafeterias
- Hospitality: Banquet halls, suites, administration
- Healthcare: Clinics, administration
- Commercial office: Conference rooms, open areas, private offices, general assembly, cafeterias
- Retail: Showcase displays, store rooms

ORDERING INFORMATION

Wall Occupancy Sensor

MODEL*	DESCRIPTION
ROS-KM-U	Wall Occupancy Sensor, 902 MHz, corner
ROS-HW-U	Wall Occupancy Sensor, 902 MHz, hallway
ROS-WA-U	Wall Occupancy Sensor, 902 MHz, wide angle
ROS-KM-Y	Wall Occupancy Sensor, 868 MHz, corner
ROS-HW-Y	Wall Occupancy Sensor, 868 MHz, hallway
ROS-WA-Y	Wall Occupancy Sensor, 868 MHz, wide angle

*Note: Only available in white.

Mounting Bracket Options

MODEL	DESCRIPTION	PART NUMBER
BR-1	Wall mount	7188K1001
BR-2	Corner mount	7188K1002
BR-3	Ceiling mount	7188K1003
EWM-BR	Wall mount bracket	8188K1000

FEATURES

- Solar powered wireless occupancy sensor
- Reliable radio reception range of 24 m (80 ft) - commercial office spaces (typical), up to 100 m (330 ft) line of sight
- Operates with no light on a full charge for over 200 hours
- Operates in low light conditions, under 25 lux (2.5 fc)
- Adjustable PIR sensitivity to fine-tune detection level
- Walk test mode ensures motion range coverage
- Hallway, corner mount and wide angle mounting applications
- Removable back plate for easy mounting
- Optional battery start assist
- Quick start-up operation, under 3 minutes @ 200 lux (20 fc)

SPECIFICATIONS

HARDWARE

- Power supply: Integrated solar cell
- Operational light level: 25 lux, (2.5 fc) minimum
- Charging light level, minimum: Above 100 lux, (10 fc)
- Charging period: 12 hours to maximum charge at 300 lux (30 fc)
- Operating life at maximum charge: 200+ hours with no battery
- Battery - start assist:
 - CR2032 coin cell
 - Battery life expectancy: Shelf life as defined by the battery manufacturer or five years, whichever occurs first
- Inputs: Teach button and Test button
- Outputs: LEDs - green, blue, and red

EQUIPMENT PROFILES

- EEP A5-07-01: Occupancy Sensor: PIR on, PIR off. Supply voltage monitor.

MOUNTING

- Mounting brackets are required for corner mount applications and recommended for wall-mount applications. Four varieties of mounting brackets are available as separate order item. (see ordering info on page 1)

COMMUNICATIONS

- 902 MHz (U) or 868 MHz (Y) radio frequencies
- Wireless range of up to 24 m (80 ft) - commercial office spaces (typical), up to 100 m (330 ft) line-of-sight
- Integrated whip antenna
- Message transmission: On motion or heartbeat period
- Heartbeat period: Minimum 100 seconds

ENVIRONMENTAL

- Operating temperature: -10°C to 45°C (14°F to 113°F)
- Storage temperature: -25°C to 65°C (-13°F to 149°F)
- Relative humidity: 5%–92% non-condensing

REGULATORY AND COMPLIANCE

- Complies with UL 916
- ANSI / ASHRAE / IES Standard 90.1
- International Energy Conservation Code - IECC
- FCC Part 15.231 - Remote Control Transmitter
- ISED (Industry Canada) RSS-210

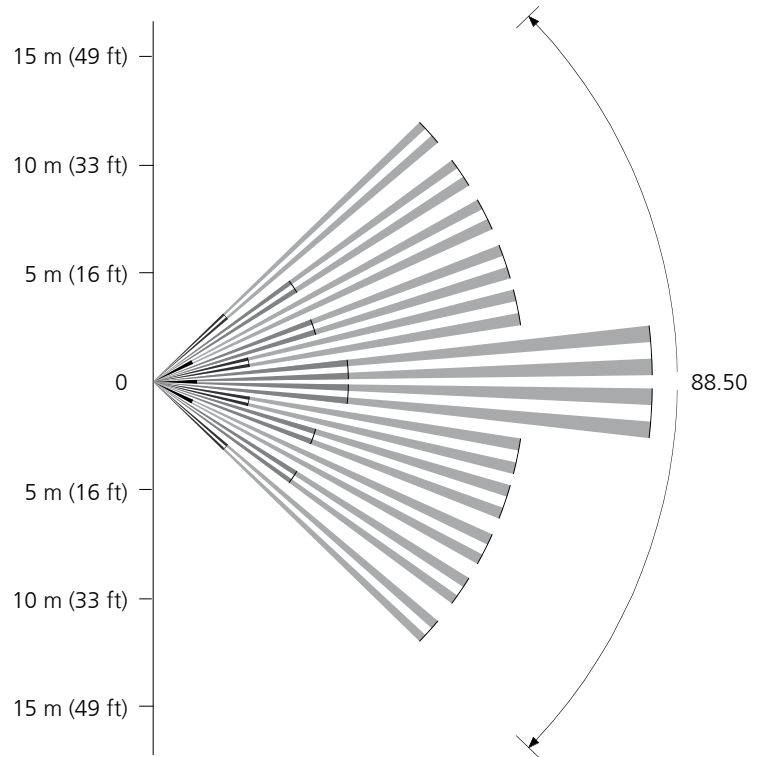
COVERAGE DIAGRAMS

ROS-KM

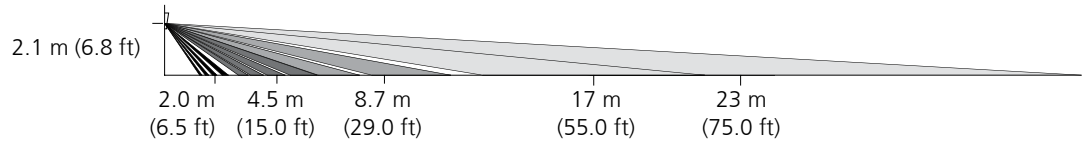
Corner model

Optimal Mounting height: 2.1 m (6.8 ft)
 Minor Motion: 115 m² (1236 ft²)
 Major Motion: 260 m² (2646 ft²)

TOP VIEW



SIDE VIEW

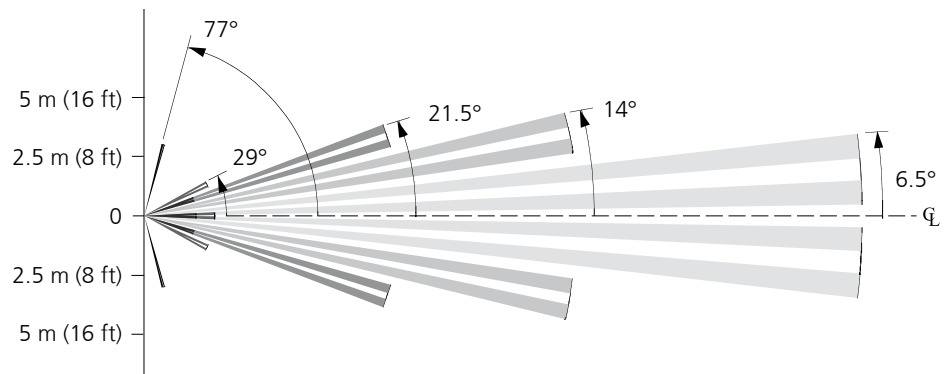


ROS-HW

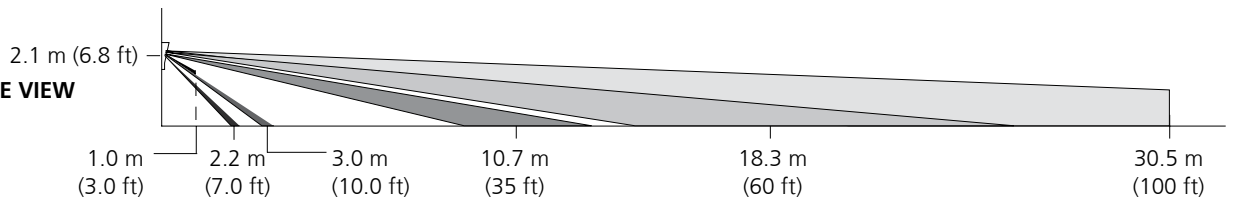
Hallway model

Optimal mounting height: 2.1 m (6.8 ft)
 Hallway length: 30.5x6 m wide (100x20 ft)

TOP VIEW



SIDE VIEW



COVERAGE DIAGRAMS

ROS-WA

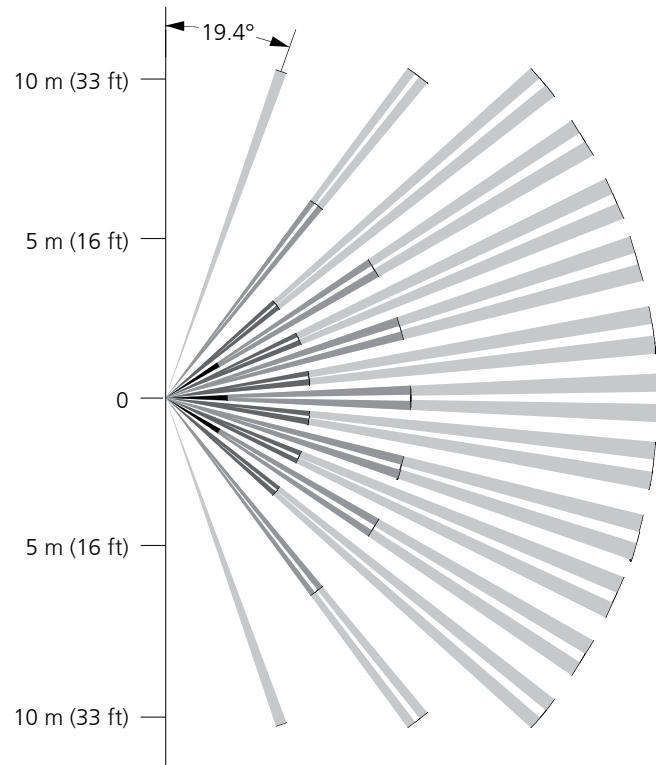
Wide angle model

Optimal Mounting height: 2.1 m (6.8 ft)

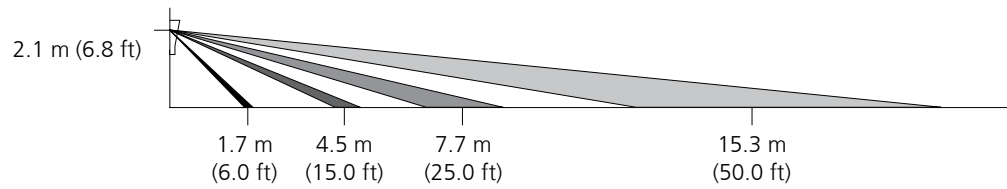
Minor Motion: 103 m² (1,100 ft²)

Major Motion: 258 m² (2,770 ft²)

TOP VIEW



SIDE VIEW



PHYSICAL

Wall Occupancy Sensor Weight and Dimensions

MODEL	HEIGHT		WIDTH		DEPTH		WEIGHT	
	mm	in	mm	in	mm	in	g	oz
ROS-KM-U/Y_	135	5.3	72	2.8	45	1.8	130	4.5
ROS-HW-U/Y_	135	5.3	72	2.8	45	1.8	130	4.5
ROS-WA-U/Y_	135	5.3	72	2.8	45	1.8	130	4.5

