

# LANSEN

Occupancy detector  
Motion long range passive IR

LAN-WMBUS-OD-PIR

## DEVICE

The occupancy detector from Lansen is a sensor that detects motions and alerts when a motion is detected using PIR technology. The occupancy device from Lansen is a plug-and-play device which is mounted in, for example, meeting rooms or any other rooms or locations where there is a need to know if there are people present in order to control light/ventilation or use it for statistical usage. The device is small and discrete and blend in nicely in any office or home environment.

## MOTION SENSOR

Wide view PIR motion sensor with 4 mirror elements for long and accurate detection. The detection range is up to 12 meters with 110° view and will also detect small movements.

## FIRMWARE

MODES	C-, T-, or S-mode (selectable on order)
SEND INTERVAL	60s - 1h (selectable on order)
ENCRYPTION	AES128 encryption OMS mode 5, Profile A. ON/OFF, unique/custom key (selectable on order)
<u>STANDARD</u>	T1-Mode, 120 seconds, encryption ON, unique key

## IR-SENSORS AND OPTICS

OPTIC	Highest possible performance mirror optics
VIEWPOINT	
HORIZONTAL:	110° (±55°)
VERTICAL:	30° (±15°)
DETECTION AREA:	12m

## WARNINGS

BATTERY	Low battery at end of life.
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## POWER/LIFETIME

POWER SUPPLY	2x 3.6V Li-SOCI2, ER14505 battery
VOLTAGE	2.9 to 3.6V
LIFESPAN	14* years typical, standard configuration and operating temperature
RADIO	14 dBm (25 mW) output power to 2 differential antennas ERP typical: 8.4 dBm (6.92 mW)

## GENERAL INFORMATION

STANDARDS	2014/53/EU (RED) EN 13757-3/4:2013, OMS 4.0.2
TEMPERATURE	-10°C to ~+32°C
RELATIVE HUMIDITY	Less than 95% None condensing
COLOR	Signal white
MATERIAL	ABS
SIZE (W x H x D)	58.9 x 100 x 30.5 mm

## DEVICES

LAN-WMBUS-OD-PIR	Occupancy sensor with passive IR.
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## ACCESSORY

Corner bracket

## PERFORMANCE

The internal radio antenna is optimized for 868Mhz and is tuned for mounting on concrete, wood or plaster. Each device has two antennas in each direction to maximize the range between the meter and collector. The device keeps track on the duration the device has been active and when the time exceeds the expected lifetime of the device, a low level warning is issued. The run time is included as a data record in the wM-Bus telegram.

Advanced analog and digital signal algorithms makes sure that only valid motions trigger alarms.

## MEASUREMENTS

Motion information, such as time since last motion, motion now, motions total etc is transmitted at a preconfigured interval using the Wireless MBUS protocol OMS compliant. The device also send 3 messages as soon as a motion is detected to reliable transfer the event to the data collector. The message contains both historical and current status. This makes the sensor ideal for integration in data collecting systems, control system or drive-by solutions.

## INSTALLATION

The device should be installed away from direct sunlight and away from places that can experience fast temperature change. The device should be mounted indoors. During the first 10 minutes after powerup the device will indicate motion with a red led to ease installation.



\* The expected battery lifetime stated is based on simulations and true measurements at 25 C° and is valid to the best of our ability but not a guarantee. The calculations and measurements can be sent upon request for your reference.