Occupancy Detector

motion long range passive IR

DEVICE

The occupancy detector from Lansen is a sensor that detect motions and alerts when a motion is detected using PIR technology. The occupancy device from Lansen is a plug-and-play that is mounted in a meeting room or any other place where there is a need to know are there is people present in the room/location in order to control light/ventilation of for example statistical usage. The device is small and discrete and blend 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° and will also detect small movements.

FIRMWARE

MODES	Can be custom ordered with C-, T- or S-mode.
INTERVAL	120s
ENCRYPTION	AES128 encryption OMS mode 5, Profile A. Can be ordered with custom configuration.
STANDARD	T1-Mode, 120 seconds. Encryption ON.

IR-SENSORS AND OPTICS

OPTIC	Highest performance Mirror optic
VIEWPOINT HORIZONTAL:	110° (±55°)
VIEWPOINT VERTICAL:	30°(±15°)
DETECTION AREA:	12m

WARNINGS

BATTERY	Low battery warning end of life.

INFO

LIFESPAN	Up to 14 years, standard configuration and operating temperature, contact us for details.
DEVICE	LAN-WMBUS-OD-PIR

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 the collectors. The device keep track on the time the device has been active and when the device has been active during the expected lifetime of the device a low level warning is issued. The run time is included as a data record in the MBUS 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.

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LANSEN
WIRELESS BUILDING TECHNOLOGY

GENERAL INFORMATION

STANDARDS	2014/53/EU (RED)
	EN 13757-3/4:2013, OMS 4.0.2
COLOR	Signal white
MATERIAL	ABS
SIZE (W x H x D)	58,9 x 100 x30,5 mm

OPERATING CONDITIONS

TEMPERATURE	-10^0 to ~$+32^0$
RELATIVE HUMIDITY	Less than 95% None condensing

POWER

POWER SUPPLY	2 x ER14505 3.6V Li-SOCl2
VOLTAGE	2.9 to 3.6V
RADIO	14 dBM (25mW) output power to antennas.
ANTENNAS	2 antennas for true differential transmission.

DEVICES

Name	Motion	Temperature	Humidity	Pressure	Sound level	Ambient light (LUX)	Battery powered
LAN-WMBUS-OD-PIR	X						X
LAN-WMBUS-OD-EQ	X	X	X	X	X	X	X

SENSORS

Type	Specification	TYP ACC
Temperature	-40^0 to $+85^0$	$\pm0,2^0$ at $+5^0$ to $+60^0$ $\pm0,5^0$ at -20^0 to $+85^0$
Humidity	0 - 100 % RH	±2 %RH at 20-80 %RH. ±3 %RH at 10-90 %RH $\pm3,5$ %RH at 0-100 %RH
Ambient light (LUX)	0,01 Lux to 83k Lux at same freq as the human eye.	4%
Pressure	20 kPa to 110 kPa absolute pressure	0,4 kPa
Sound level prel.	45 dBA to 90 dBa at 850 HZ prel.	tdb.

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