



The Ratio®-Solar-Occupancy detector PM101 is a battery- and maintenancefree radio sender and is suitable to wall and ceiling suspension and does not need any external supply voltage. The power generation is effected by transmission of roomlight into electrical energy by a solargenerator. It conduces to dedect motion depending on light and the transmission by radio to the radio actuators/gateways to switch on/off the light e.g..

By short roomlight for the power generation the Ratio®-occupancy detector PM101 can also be runned with a battery or by 24VDC.

**New, available Jan. 08**

Techn. Daten	Occupancy Detector PM101	Remarks
Operating data	Solar Power Generator, battery-free.	
Radio technology	Protocol EnOcean-PTM, Transmission power max. 10mW EIRP	Frequency 868,3MHz Modulation ASK
Radio module / Channels	TCM120 / 2 for present and not present	
Start up time from empty storage	for learning use	> 10 min. @ 1000 lx
	for use for 24 houres in darkness	> 5 h @ 200 lx or
Movement collection	PIR-Sensor, PIR-Range 5m/360°, Angell ca. 120°, Preferred direction horizontal, Lightsensor 10 .. 1000 Lux adjustable by potentiometer	
Measurement value logging	Every 10 minutes for the light valuet	
Transmission interval	By Event „Present“	
Range	Interior 30 to 100m	
Dimensions	Casing: LxBxT 120mm x 100mm x 25mm	
Mechanical Data	Casing: plastic ABS,	Weight: 70g
Mounting / Assembly	Finery on a flat underground, max. 2 m away from windows.	Adhesion or screws
Environmental conditions	Temperature when in operation	0°C ... +55°C
	Storage temperature	-40°C ... +85°C
	Rel. humidity (non-condensing)	0 ... 95%
Protection category	IP20	
Approbation	R&TTE guidelines 1999/5/EC and conforming to EU regulations. ROHS conforming according to 2002/95/EC.	

Telegram							
Byte	Symbol	Significance	Value	Byte	Symbol	Meaning	Value
0	SYNC1	Synchronization	A5h	1	SYNC2	Synchronization	5Ah
2	HEADER	Length	0Bh	3	ORG	Type of transmitter	05h
4	DATA3	Present ON Not present OFF	10h 70h	5	DATA2	always 0	00h
6	DATA1	always 0	00h	7	DATA0	always 0	00h
8	ID3	ID-Number part 1	xxh	9	ID2	ID-Number part 2	xxh
10	ID1	ID-Number part 3	xxh	11	ID0	ID-Number part 4	xxh
12	STATUS	Status byte	xxh	13	CHK	Check sum	xxh

Bezeichnung	Typ	Artikelnummer
Occupancy detector 360° / 8m with Solar-Cells, battery-less	<b>PM101-SOL</b>	<b>2902000</b>
Occupancy detector 360° / 8m with power supply 24VDC	<b>PM101-SPG</b>	<b>2903000</b>
Occupancy detector 360° / 8m with battery	<b>PM101-BAT</b>	<b>2904000</b>