Electrical Data	
Frequency emitted	(K-Band) 24.125GHz
Radiated power	<16dBm EIRP
Rated supply voltage	12 – 24VAC ±10% - 12 24VDC +30% / -10%
Main frequency	50 to 60HZ
Power consumption	< 1W (VA)
Output Relay SPDT	Rated Voltage 30VAC/DC Max switching current 1A (resistive load) Max switching power 30W (resistive load) Hold time 0.5 – 9s (adjustable)

Environmental Data	
Temperature range	-20°C to +70°C (-4°F to +158°F)
Humidity	from 0% to 90% RH
Immunity	R&TTE 1999/5/EC
EMC	89/336/EEC
Max. mounting height	4m (13.12ft)
Protection degree	IP54

General Data	
Sensing field orientation	double mechanical adjustment, lateral and vertical
Detection angle	Vertical 0° to 90° in 15° increments Lateral +/- 30° in 7.5° increments
Sensing field shape	bidirectional model By Sensor module orientation
Detecting area	(mounting height 2.2m (h = 7.22ft)) Wide sensing field 4m (W) x 2m (D) (13.12ft (W) x 6.56ft (D)) Narrow sensing field 2m (W) x 2.5m (D) (6.56ft (W) x 8.20ft (D))
Detection mode	Only bidirectional to detect motions towards and away from sensor Uni & bidirectional to detect motions towards or/and away from sensor
Motion detecting speed	0.05 - 1m/s (0.164 - 3.28fps) (measured in the sensor axis)

Adjustments and Settings	
Manual Setting Device	By two buttons on main PCB board.
Remote Setting Device	IR remote controller (optional)
Reset to factory set Value	(only by PCB buttons) 1 - Restore PIN security code 2 - Restore all factory values
Sensitivity	10 levels (1 to 10) It allows increment or decrement of detection field.
Relay hold time	10 levels (0.5 to 9s) It fixes the maintenance's time of the relay status.
Uni-bidirectional mode	It sets direction mode detection (only for uni-bidirectional device).
Immunity detection	"Quasi-presence", Normal mode, Increased Immunity (Implemented by a digital filter) It prevents some external noise as objects carried by wind, strong rain, etc.
Relay status	Active, Passive, (only by PCB buttons) It permits to fix the relay status: normally open or close. Automatic mode / Permanently Open / Close. (only by IR remote controller) It permits to enable or disable normal sensor detection and set ON or OFF permanently relay output. AUTO / OPEN / CLOSE
Security code 4-digit PIN access code	(only by IR remote controller) It permits to lock or unlock optional remote controller keyboard setting.

LMS SE CG MO RAD 01
LMS SE CG MO RAD 02

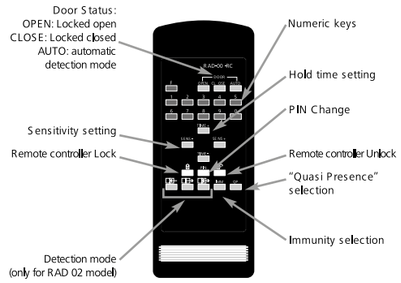
CODE: P100PM0277

Motion Radar Sensor is a digital unit or bidirectional motion sensor for trouble-free opening of all types of automatic doors (sliding, swinging, folding, revolving, speed-doors, overhead doors, etc...), for pedestrian and civil applications. It can be adapted to every application without further accessories and can be controlled by an infrared remote controller. Mounting height up to 4m also available in uni- or bidirectional mode to detect motion towards or away from the device. Like most of other microwave detectors, equipped with planar flat antenna, motion radar sensor activates automatic doors utilizing doppler shift effect for detecting movements.

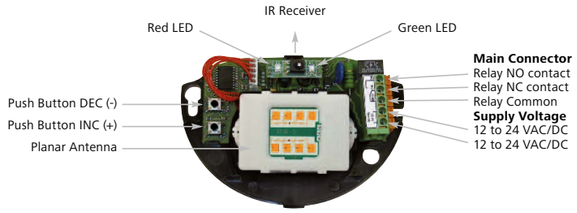
Key Features
- K-Band radar sensor compatible with all types of automatic doors.
- 3-D adjustable sensor position offers precise orientation of the activation pattern.
- Microprocessor technology filters out possible weather condition interferences
- IR remote controller can be added for easy adjustment
- UL325 approved

The device is set up in factory at the following default values:	
1. Sensitivity	10 (max level)
2. Relay hold time	1 (min: 0.5 sec)
3. Uni-Bidirectional Detection Mode	Bi-directional (Uni-directional mode is available only for RAD 02)
4. Immunity detection	Immunity: OFF
5. Relay Status:	Passive
6. PIN security:	0000 - block disabled (only for remote controller)

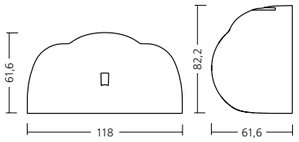
IR remote controller



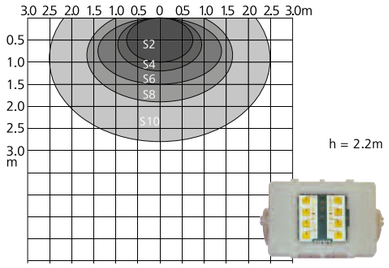
Electrical Connections



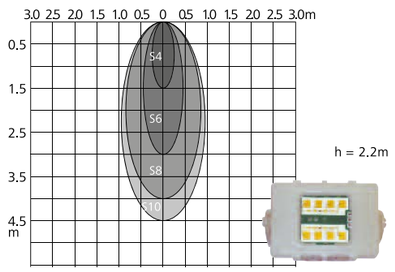
RAD 01



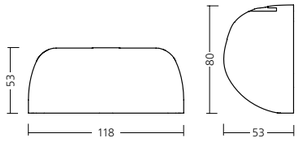
Detection area vs Sensitivity value (vertical angle 45°); vertical mount mode.



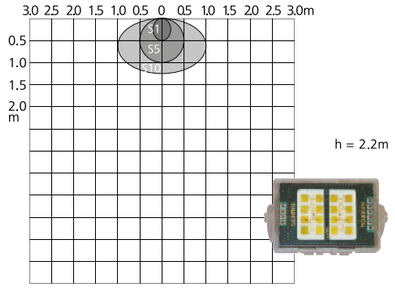
Detection area vs Sensitivity value (vertical angle 45°); horizontal mount mode.



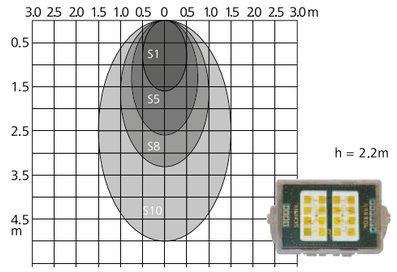
RAD 02



Detection area vs Sensitivity value (vertical angle 15°).



Detection area vs Sensitivity value (vertical angle 45°).



MOTION RADAR SENSOR CODE: RAD01 / RAD02

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