



# Microwave motion and daylight sensor



## Overview

The Kosnic Microwave Sensor is an energy-saving solution that enables the use of light only when and where you need it. The sensor can be installed in a range of Kosnic products to provide presence and ambient light sensing functions. Set up via on board DIP switches.

#### **Features**

- Powered by low voltage 12Vdc
- Compact design
- Daylight sensor
- Stand-by dimming
- Parameters settable by DIP switches



**Datasheet** 

# **Specifications**

Product Code	MWS-DC (KBTNLS1-MWS2)	
Voltage	12Vdc	
Stand-by Power	≤0.5mW	
Protection	IP20 (when integrated)	
Connection	Connector	
Working Mode	5V PWM	
Frequency / Transmission Power	5.8GHz ± 75MHz ISM band / 0.5mW max	
Mounting Height	3-4m (Max 6m)	
Detection Radius	≥6m (mounting height 3m, moving speed 0.3m/s)	
Detection Area	100%/50%	
Detection Angle	150°	
Hold Time	8s/30s/3min/30min	
Daylight Sensor	5lux/15lux/50lux/Disable	
Stand-by Dimming Level	25%/50%	
Stand-by Dimming Period	0s/30s/3min/+∞	
Net Weight	20g	
OperatingTemperature	-25 to 60 °C	

Set the DIP switches according to the tables below.

#### **Detection Area**

DIP switch 1 controls the microwave detection sensitivity. On the highest setting the sensor will detect movement within a 12m radius when mounted at 6m high.

O N I	1	
ON	ON	100%
L		
	-	50%

#### **Hold Time**

DIP switches 2 and 3 control the time the luminaire can be set to stay on after motion is no longer detected. It is recommended that the shortest time setting be applied for adjusting the detection area.

	2	3	
ON	ON	ON	8s
L	-	ON	30s
	ON	-	3min
	-	-	30min

#### Stand by Period

Controls the length of time which the luminaire remains at a dimmed light level before switching off in the absence of motion detection. When set to 0 sec, no dimming will occur, and the luminaire will turn off according to the hold time set. When set to +∞ the luminaire will remain at a dimmed level in the absence of motion detection.

motion detection.	
When set to 30s or 3 min, the luminaire will initially dim in the absence of motion	
detection then after the standby period will automatically turn off.	

	4	5	
ON	ON	ON	0s
ı	-	ON	30s
	ON	-	3min
Ш	-	-	+∞

#### **Daylight Sensor**

DIP switches 6 and 7 control the daylight threshold. If the ambient light level is above this level the sensor will not switch the luminaire on. 5 lux is dark while 15 lux is twilight and 50 lux is very overcast. On the +∞ (infinity) setting the daylight sensor is disabled so the luminaire will switch on whatever the light level.

	6	7	
ON	ON	ON	5lux
╽	-	ON	15lux
	ON	-	50lux
	-	•	Disable



**Datasheet** 

### Stand by Dim level

The luminaire can be set to remain on at a low level when no motion is detected.

8	
ON	50%
-	25%

## **Dimensions**

