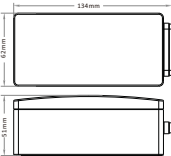


MICROWAVE MOTION SENSOR

Introduction

Designed to optimize energy saving, PolyBrite Lighting Control Solutions allow lighting to be comprehensively managed. The benefits include reduced energy consumption, longer lamp life, reduced maintenance and lower costs. Microwave motion sensor MSA277 is designed for roadway lighting while MSD277 is for warehouse applications.

MSA277



- Automatic dimming when used in combination with 1-10V dimmable LED drivers.
- Designed for roadway lighting real-time dimming control.
- Motion detection by microwave detector (radar), 100% illumination upon sensing car travelling above 20Km/h.
- Wireless communication allows lights within the same group to light up together, and return to low power state when cars are not detected.
- Adjustable stand-by brightness.
- Adjustable delay time from 5 seconds to 10 minutes.
- Power-on delay time for peak hour conditions can be preset from 4 to 8 hours.
- IP67 rated.



DIP Switch Configuration

a) 100% Brightness Hold Time

	1	2	3	Delay period
I	↑	↑	↑	5s
II	↑	↑	↓	1min
III	↑	↓	↓	3min
IV	↓	↓	↓	10min

b) Stand-by Brightness Level

	4	5	Constant Voltage Output	Luminaire Brightness Ratio
I	↑	↑	5V	45-50%
II	↑	↓	3V	25-30%
III	↓	↑	2V	15-20%
IV	↓	↓	1.5V	5-10%

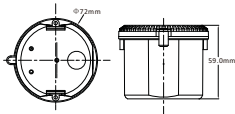
c) Power-on Delay Time

	6	7	8	Power-on Detection Period
I	↑	↑	↑	15s
II	↑	↑	↓	4s
III	↑	↓	↓	6s
IV	↓	↓	↓	8s

d) Wireless Management Grouping Configuration

	9	10	Wireless Communication Frequency Band
I	↑	↑	A
II	↑	↓	B

MSD277



- Automatic dimming when used in combination with 1-10V dimmable LED drivers or ballasts
- Built-in adjustable daylight sensor
- Detection area, time delay and daylight threshold can be precisely set via DIP switch
- Wide detection area, range up to 16m in diameter and mounting height 15M Max suitable for warehouse use
- Special clip for installation easy to be fixed with high bay
- Three kinds of installation
- IP65 rated.

DIP Switch Configuration

a) Detection Area

	1	2	Area
I	↑	↑	100%
II	↑	↓	50%

b) Hold Time

	3	4	5	6	7	8	Hold Time
I	↑	↑	↑	↑	↑	↑	5s
II	↑	↑	↑	↑	↑	↓	30s
III	↑	↑	↑	↓	↑	↓	90s
IV	↑	↑	↓	↑	↓	↓	3min
V	↑	↓	↑	↑	↓	↓	20min
VI	↓	↑	↑	↑	↓	↓	30min

c) Stand-by Period

	9	10	11	12	Stand-by Period
I	↑	↑	↑	↑	+∞
II	↑	↑	↑	↓	60min
III	↑	↑	↓	↑	30min
IV	↑	↓	↑	↑	10min
V	↑	↓	↑	↓	5min
VI	↓	↑	↑	↓	5s

d) Stand-by Dimming Level

	8	9	10	11	12	Dimming Level
I	↑	↑	↑	↑	↑	50%
II	↑	↑	↑	↑	↓	30%
III	↑	↑	↓	↑	↓	20%
IV	↑	↓	↑	↑	↓	10%

e) Daylight sensor

	10	11	12	Daylight sensor
I	↑	↑	↑	Disable
II	↑	↑	↓	200lux
III	↑	↓	↑	100lux
IV	↑	↓	↓	50lux

TECHNICAL PARAMETERS

Model No.	MSD277	MSA277
Operating voltage	120-277VAC, 50/60Hz	120-277VAC, 50/60Hz
Rated load	400W@120VAC, 800W@220-277VAC (inductive) 800W@120VAC, 1200W@220-277VAC (resistive)	N/A
HF system	5.8GHz±75MHz, 15M wave band	10.525GHz
Transmitting power	<0.5mW	<0.5mW
Power consumption	≤0.8W(standby), <1.5W(operation)	≤0.8W
Detection zone	Max.(D x H): 16m x 15m	Max.(D x H): 10m x 25m
Detection sensitivity	100% / 50%	N/A
Hold time	5s / 30s / 90s / 3min / 20min / 30min	5s / 1min / 3min / 10min
Daylight sensor	50lux / 100lux / 200lux / Disable	N/A
Stand-by period	5s / 5min / 10min / 30min / 1h / Disable	N/A
Stand-by dimming level	10% / 20% / 30% / 50%	5-10% / 15-20% / 25-30% / 45-50%
Mounting height	15m Max.	15m Max.
Motion detection	0.5~3m/s	20-120km/h
Detection angle	150°(wall installation), 360°(ceiling installation)	Rectangle Area: 120°(L) x 60°(W)
Operating temperature	-35°C~70°C	-40°C~60°C