Specification For Sensor LED Driver
Model No. : MLC40C-M

Elnummer: 3253677

Feature

- It can detect slight motion, such as typing or keyboard or taking note.
- Integration of slight microwave motion sensor, daylight sensor and LED driver.
- Achieve daylight harvesting with daylight sensor MS06
- Automatic switching and dimming based on motion. Whole dimming range is **flicker-free**.
- Grouping function by wires.
- Sensor parameters set by dip switches and remote control allow for easy installation.
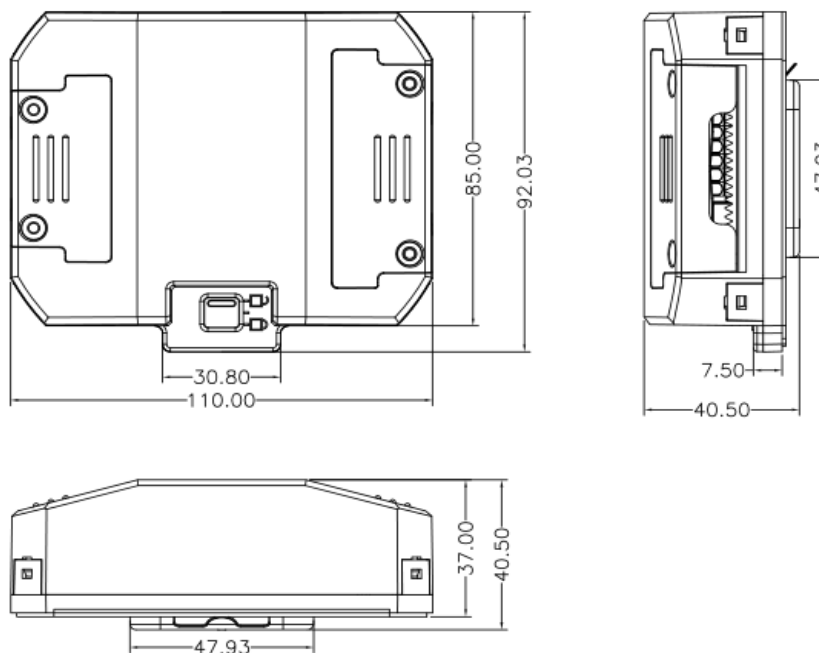
Introduction

This a particular sensor driver for indoor use. Combine with flicker-free dimming and microwave motion detection technology, more energy saving and intelligent for lighting applications, such as office, meeting room, class room etc.

Parameters

Model No.	**MLC40C-M**
Operating voltage	220~240Vac, 50/60Hz
Input current	0.26Max.
Output constant current	700mA, 750mA, 800mA, 850mA, 900mA, 950mA, 1000m A, 1050mA, set by dip switch.
Output voltage	30-42Vdc
No load voltage	45Vdc
Efficiency	≥ 86% (@230V,full load)
Power factor	≥ 0.9
Transmitting power	< 1mW
Power consumption	≤ 1W(standby)
HF system	5.8GHz± 75MHz, ISM wave band
Detect sensitivity	100%/50%
Hold time	5s / 5min / 15min/ + ∞ (see note 1)
Stand-by period	0s/10min /30min / +∞
Daylight sensor	50lux/150lux /300lux/Disable(see note 2)
Stand-by dimming level	10% /25%

Mounting height	3.5m Max.
Detection area(Radius)	Switch on: 4m (Only detect obvious movement such as walking). After switching on 2m(can detect slight motion, such as typing)
Motion detection	0.5-3m/s
HF system	5.8G Hz +/-75MHz, ISM band
Detection angle	150° (Wall installation) 360° (Ceiling installation)
Operating temperature	-25~50℃
IP rating	IP20
Synchronizing function	Yes 4 terminals for grouping(see note 3)
EMC standard	EN55015:2013, EN61000-3-2:2014, EN61000-3-3:2013 EN61547:2009
LVD standard	EN61347-1:2008+A1+A2, EN61347-2-13:2014
Certification	CE & SAA (pending)
Dimension(L*W*H)	110*92*40.5mm

Note:

1, +∞ means led panel will remains 100% on even there is not movement.

2, Disable means daylight sensor does not work. Sensor will switch on lights when motion is detected even if with sufficient light.

3, In one group, any Master or Slave detect the motion, all panel lights in the group will turn on at the same time.

Dimension

Tel: +86 755 2305 7253/59   Fax: +86 755 2786 3012   Website: www.merrytek.com   Post Code: 518000
Add.: No. 3 Building, Kuaihong Industry Park, 380 Xiangshan Avenue, No. 3 Industry Park Luotian, Songgang Town, Bao'an District, Shenzhen, Guangdong, China

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Function

ON/OFF function

With sufficient light ,the lamp doesn't switch on even there is movement .

With insufficient light ,the lamp switch on when there is movement .

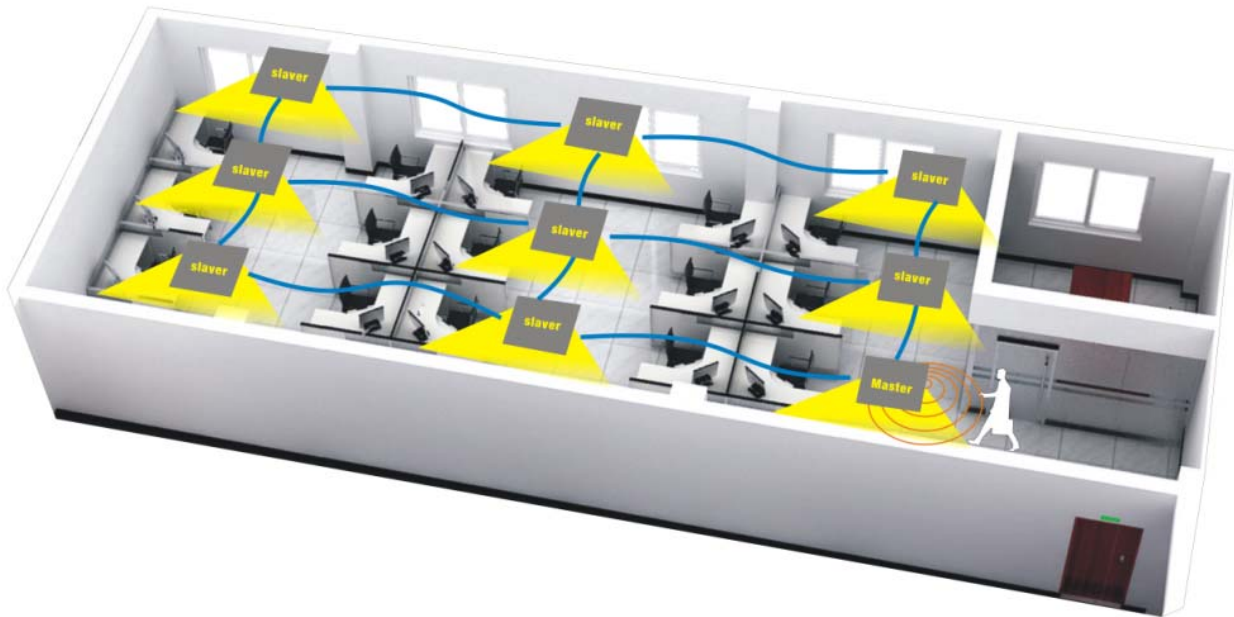Any motion such as typing on keyboard or taking note detected,the lamp keeps on.

When people leave,the light switch off .

Dimming function

With sufficient light ,the lamp doesn't switch on even there is movement .

With insufficient light ,the lamp switch on when there is movement .

Any motion such as typing on keyboard or taking note detected,the lamp keeps on.

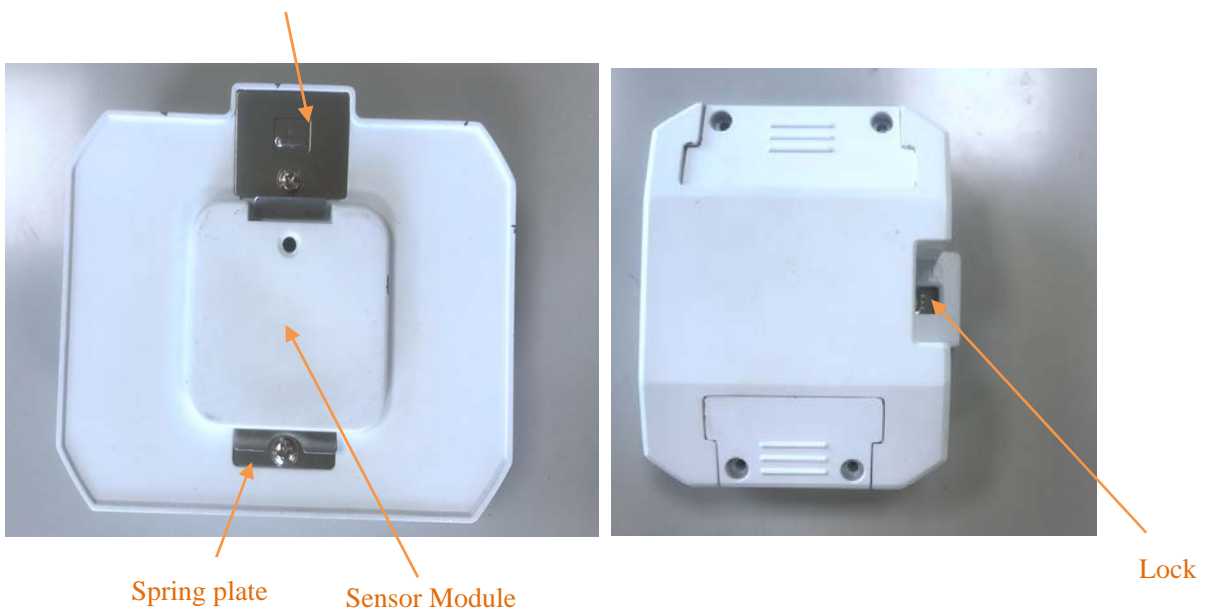After hold time, the sensor dims the lamp at a low light level if no new motion trigger.

After stand-by period, the sensor switches off the lamp if no motion is detected in its detection zone.

Group function

The driver has synchronization terminals 'SYNC' for gouging function. Connect all panels with cables to make them in a same group as above picture. If Master detects the movement, Master and Slave will turn on at the same time. Or if any slave detects the movement, Master and Slave will turn on at the same time.
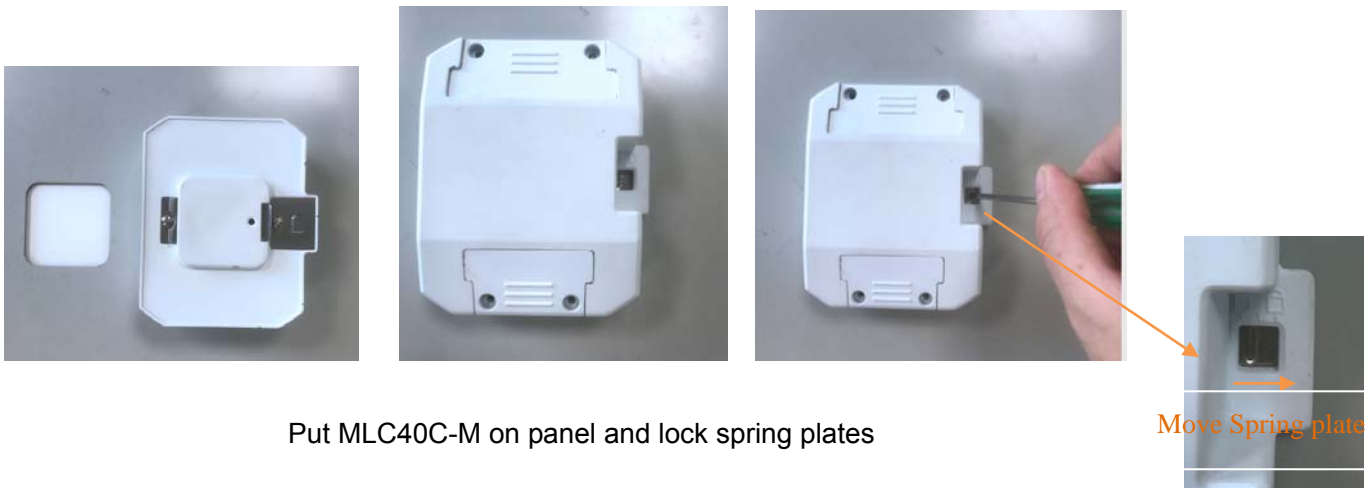

Spring plate   Sensor Module

Lock

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How To Install

Make a square hole of metal and EVA of LED panel light. Put sensor module close to light guide plate.

Make a hole on the backside of panel, can use a rubber seal block the hole if no need sensor driver.

Put MLC40C-M on panel and lock spring plates
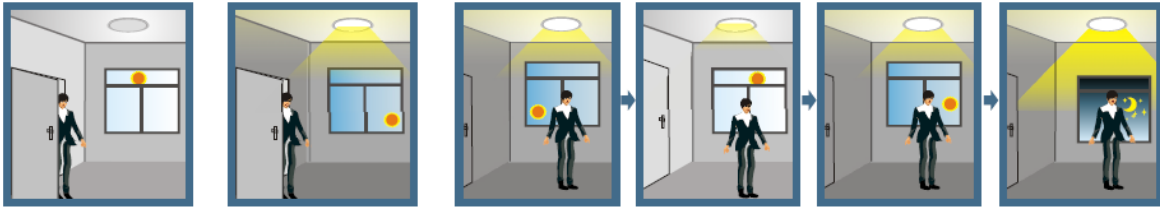
Move Spring plate to lo

Sensor parameter setting

Detection area, hold time, daylight senor, stand-by period and stand-by DIM level can be optional for combination of dip switches.

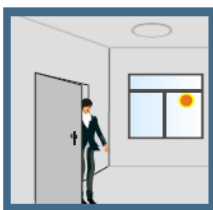| Detection Area		Hold Time			Daylight Sensor			Stand-by Period			Stand-by DIM Level	
1		2	3		4	5		6	7		8	
ON ↑	ON 100%	ON	ON	5S	ON	ON	50Lux	ON	ON	0S	ON	10%
		–	ON	3min	–	ON	150Lux	–	ON	10min		
	– 50%	ON	–	15min	ON	–	300Lux	ON	–	30min	–	25%
		–	–	+∞	–	–	Disable	–	–	+∞		

Optional function—Daylight harvesting

MLC40C-M works with MS06 will achieve daylight motion detecting and daylight harvesting as below.
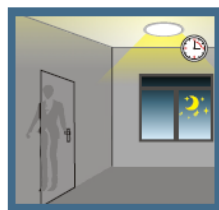MS06 will be built in LED panel.

Ambient light larger than preset illumination level (Set by 1-10V daylight sensor), the lamp keeps off.

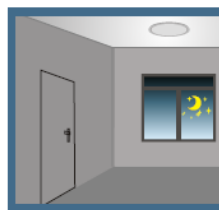Ambient light below than preset illumination level, the lamp switches on when motion is detected.

The lamp lights on 100% illumination or dims to maintain the preset illumination level against ambient light.
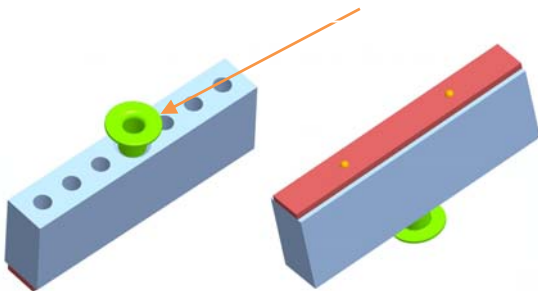
If with sufficient ambient light, the lamp turns off at once, even with motion trigger.

If with insufficient ambient light, the lamp dims to a stand-by dimming level (Set in the motion sensor) when no motion detected during hold time, and then switches off after stand-by period.

Daylight harvesting sensor MS06

Built-in daylight harvesting senor