

## PWM Street lighting controller

HES lighting controllers are water proof PWM type covering Sealed, Gel battery charging. Will be long time using for solar street lighting system.

It is perfect for a variety of lighting applications like solar street lights, advertise boards, traffic etc. 1-13 hours timers programmed , which meet more lighting needs. IP67 allows device installed in humid environments.

### Features

- Robust fully protected case (IP67) , outdoor using Aluminum housing for better cooling
- External temperature sensor
- Soft-start enhanced design for a longer LED lifetime
- PWM charging
- Small size fits in most applications
- 1~13 hours timers option

### Protections

- |                        |                          |
|------------------------|--------------------------|
| PV reverse polarity    | Battery overcharge       |
| Battery over discharge | Battery reverse polarity |
| Battery overheating    | Load overload            |
| Load short circuit     |                          |

### Operation

LED Menu

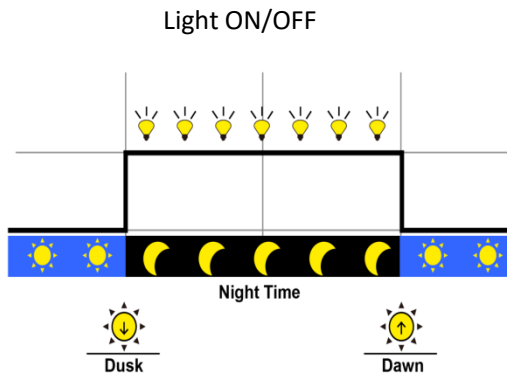
### Certifications

- Compliant with European Standards (CE)
- RoHS compliant
- Manufactured according to ISO 9001 and ISO 14001

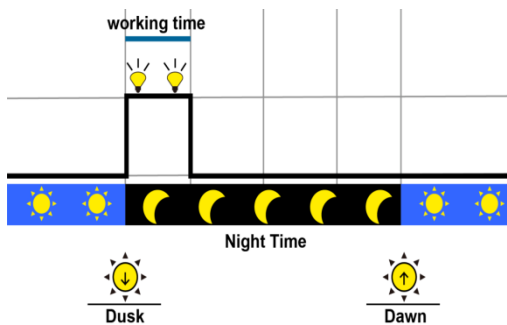


## Setting operation

- 1) Manual Mode : Control the load via the button pressing.
- 2) Light ON/OFF(Default)



- 3) Light ON + Timer



Note: In the mode of Light ON/OFF and Light ON/Timer, the Load is turned on after 10Min. delay.

Test Mode (Default): Test Mode is as same as Light Control Mode but no delay.  
The correspondence table of Load Work Mode & LED digital tube value

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Value	Working mode	Value	Working mode
0	Light ON/OFF	0.	Light ON + 8 hours
1	Light ON + 1 hours	1.	Light ON + 9 hours
2	Light ON + 2hours	2.	Light ON + 10 hours
3	Light ON + 3hours	3.	Light ON + 11 hours
4	Light ON + 4 hours	4.	Light ON + 12 hours
5	Light ON + 5 hours	5.	Light ON + 13 hours
6	Light ON + 6 hours	6.	Manual Control
7	Light ON + 7 hours	7.	Test Mode

## Specifications

Model	LS1012EPD	LS1024EPD	LS2024EPD
Nominal system voltage	12V DC	12/24V DC auto work	
Rated charge current	10A	10A	20A
Rated discharge current	10A	10A	20A
Max. PV input voltage	30V	50V	50V
Battery type	Sealed		
Equalize charging voltage*	14.8V		
Boost charging voltage*	14.4V		
Float charging voltage*	13.7V		
Low voltage reconnect voltage*	12.6V		
Low voltage disconnect voltage*	11.1 V		
Self-consumption	$\leq 4.58\text{mA}(12\text{V})$ ; $\leq 6.01\text{mA}(24\text{V})$		
Temperature compensation coefficient	$-5\text{mV}/^{\circ}\text{C}/2\text{V}$		
Grounding	Common positive		
Overall dimension	$108.5 \times 75 \times 25.6\text{mm}$		
Power cable	12AWG(4.0mm <sup>2</sup> )	12AWG(4.0mm <sup>2</sup> )	10AWG(6.0mm <sup>2</sup> )
Net weight	0.41kg	0.41kg	0.44kg
Enclosure	IP67		
Working environment temperature	$-35^{\circ}\text{C} \sim +55^{\circ}\text{C}$		