

Specification

Product Name: Sensor DIM LED Driver

Product Model: MC25C-PS & MLC40C-PS1 & MLC65C-PS

Versions	Release/ change Date	Reason	Publishing
V1.0	2023.03.22		James Guo

【Product Feature】

- Isolated two-stage circuit frame, full dimming and flicker-free.
- Support DIP switches to set the current gear.
- Support 12V auxiliary power supply, with sensing split head can achieve integrated sensing function.
- Equip with PWM dimming control port.
- Suitable for various microwave sensors or wireless smart modules.



【Parameters】

Product series	MLC25C-PS	MLC40C-PS1	MLC65C-PS
Input			
Rated voltage	220-240V AC 50Hz/60Hz		
Stand-by power	≤0.5W (Equip with Merrytek 5.8Ghz sensing split head)		
Surge	1KV(L/N,EN61000-4-5)		
Power factor	≥0.95 (230V Max load)		
Input current	≤0.13A @230VAC full load	≤0.23A @230VAC full load	≤0.32A @230VAC full load
Inrush current	<15A (100us half-current) @230V AC	≤20A (100us half-current) @230V AC	≤30A (100us half-current) @230V AC
Working efficiency	≥84% (230V Max load)	≥86% (230V Max load)	≥88% (230V Max load)
Output			
Working model	CC		
Type of load	LED		
Flick	≤5%		
Constant current accuracy	Constant current accuracy ±5%		
Auxiliary driver parameters	12VDC Current: 100mA Max		
No-load output voltage	60VDC Max		
Full load power	25W Max	40W Max	65W Max
Load current	300mA / 350mA / 400mA / 450mA 500mA / 550mA / 600mA / 650mA 700mA	600mA / 650mA / 700mA / 750mA 800mA / 850mA / 900mA / 950mA 1000mA / 1050mA	1200mA / 1250mA / 1300mA 1350mA / 1400mA / 1450mA 1500mA / 1550mA / 1600mA
Load output voltage range	300mA / 9-42VDC 350mA / 9-42VDC 400mA / 9-42VDC 450mA / 9-42VDC 500mA / 9-42VDC 550mA / 9-42VDC 600mA / 9-42VDC 650mA / 9-38VDC 700mA / 9-36VDC	600mA / 9-42VDC 650mA / 9-42VDC 700mA / 9-42VDC 750mA / 9-42VDC 800mA / 9-42VDC 850mA / 9-42VDC 900mA / 9-42VDC 950mA / 9-42VDC 1000mA / 9-40VDC	1200mA / 15-42VDC 1250mA / 15-42VDC 1300mA / 15-42VDC 1350mA / 15-42VDC 1400mA / 15-42VDC 1450mA / 15-42VDC 1500mA / 15-42VDC 1550mA / 15-42VDC 1600mA / 15-40VDC

1050mA / 9-38VDC

Abnormality Protection Requirements

Protection mode	Input overvoltage protection	Input no-load protection	Input short circuit protection
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Environmental Requirements

Operating temperature	内置: -25...+50℃
Maximum shell temperature(Tc)	85℃
Storage temperature/humidity	-40℃...+80℃ Humidity: ≤85% (non-condensation)

Certificate Standards

Certificate	CE、UKCA、SAA
Environmental requirement	RoHS2.0, Reach requirement
Safety standards(LVD)	EN61347-1, EN61347-2-13
EMC standards	EN55015, EN61547, EN61000-3-2, EN61000-3-3
Withstand voltage	Primary to secondary: 3.75KVAC Primary to ground :1.5KVAC
IP Rating	IP20
Product Category	Class I

Others

Wiring method	Press terminal, wire diameter: 0.5-1.0mm ²		
Installation	Built-in		
Package	PE bag clapboard, carton (K=A)		
Net weight	144.5±5g	174±5g	225±5g
Lifetime	5 years warranty@Ta 230V full load		

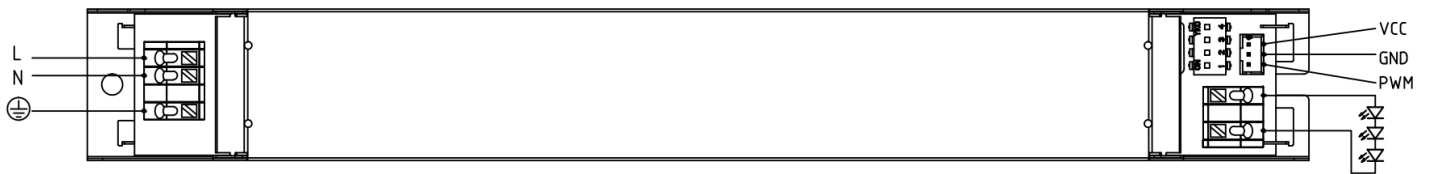
【Split Head Collocation】

- MC002D 6
- MC087D 1
- MC087D RC
- MC131D A&B
- MC137D A&B
- MSA207D
- MC068D RC
- MC116D RC
- MC116D B1

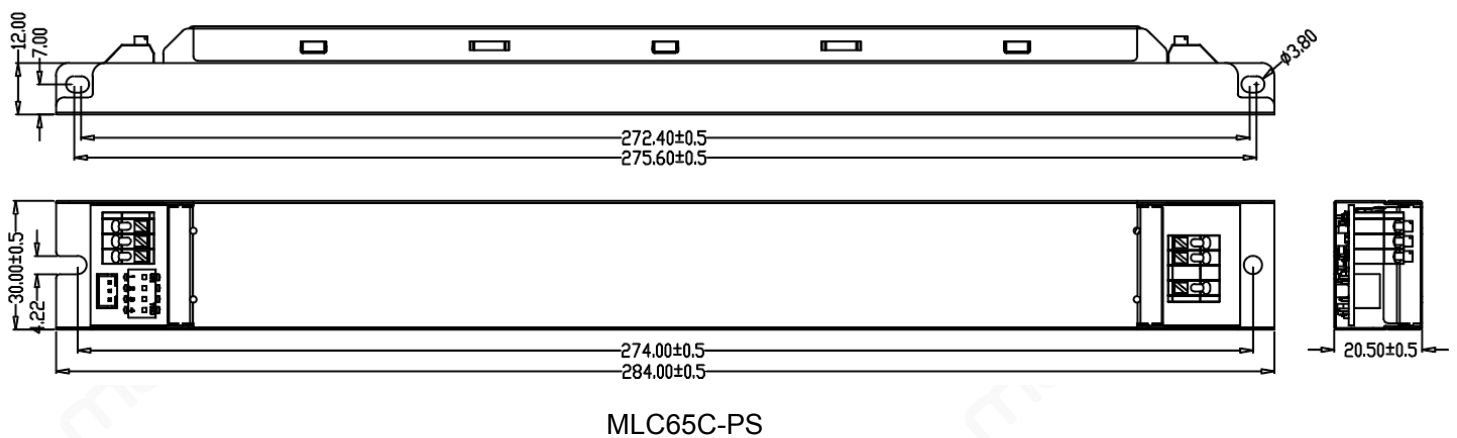
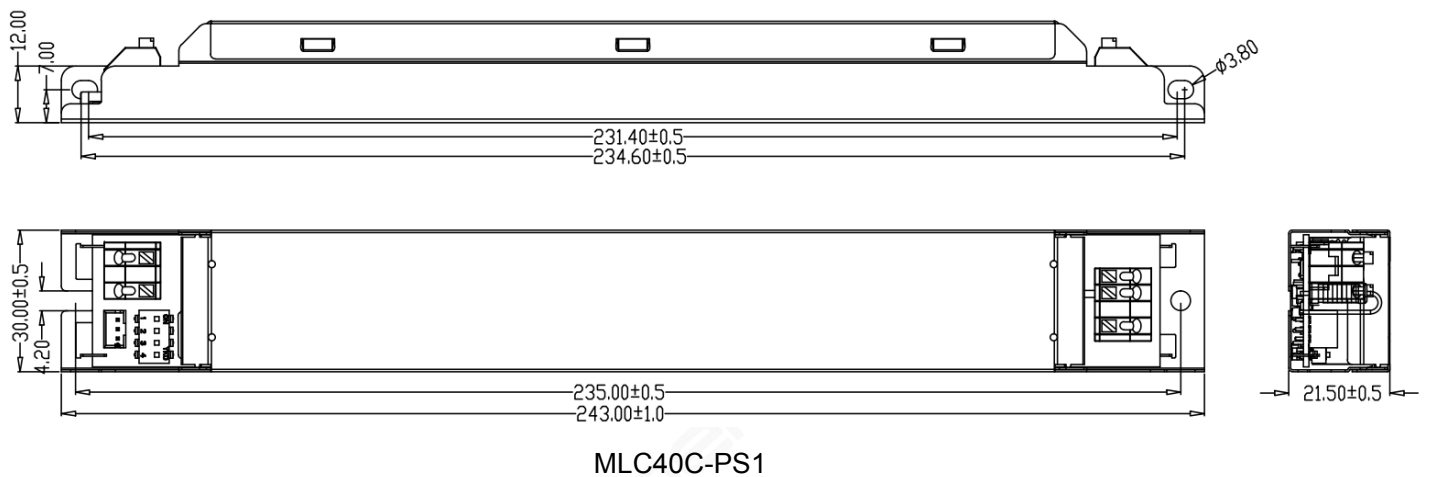
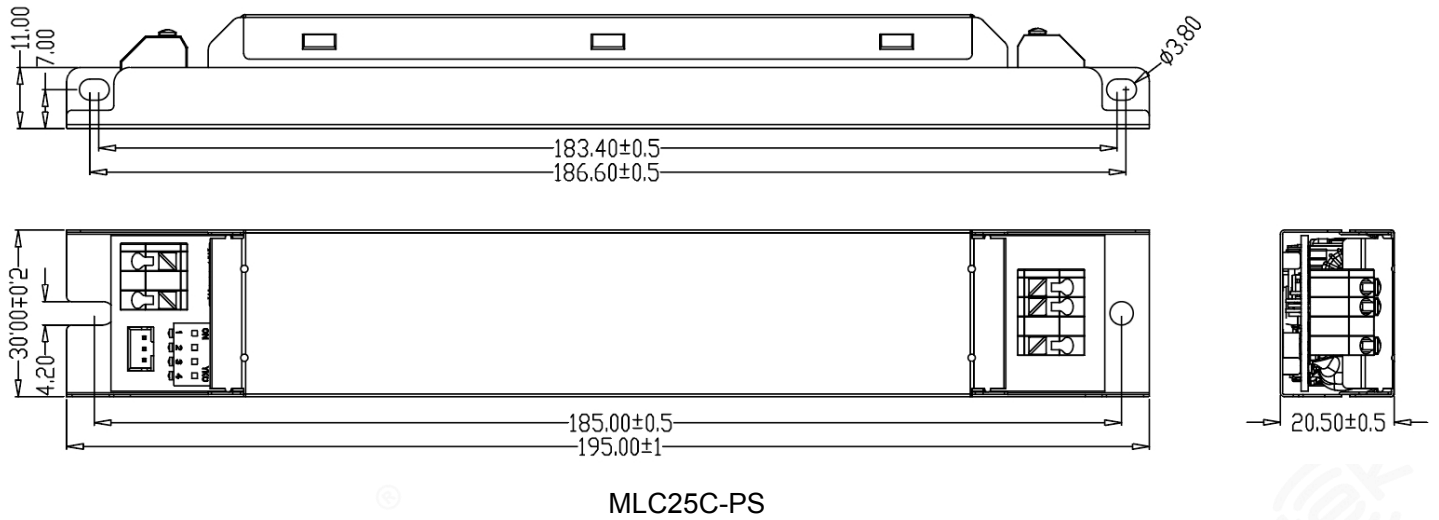
【Product Information】

- Wiring and function



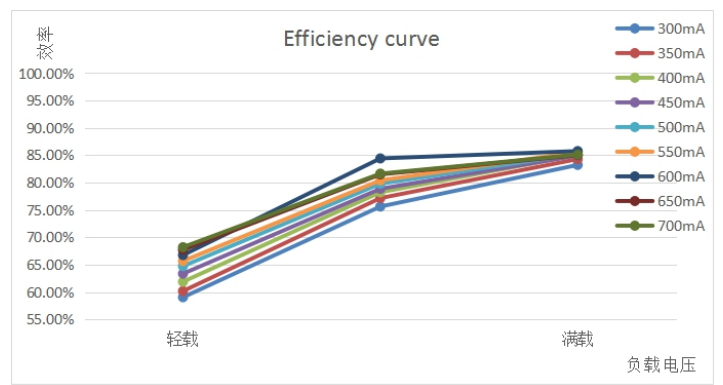
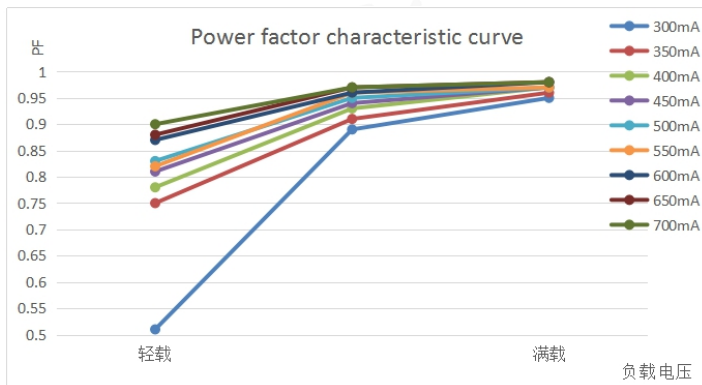


● Dimension (Unit: mm)

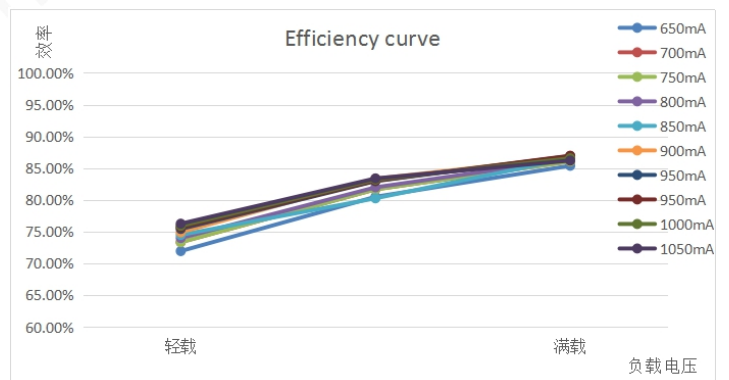
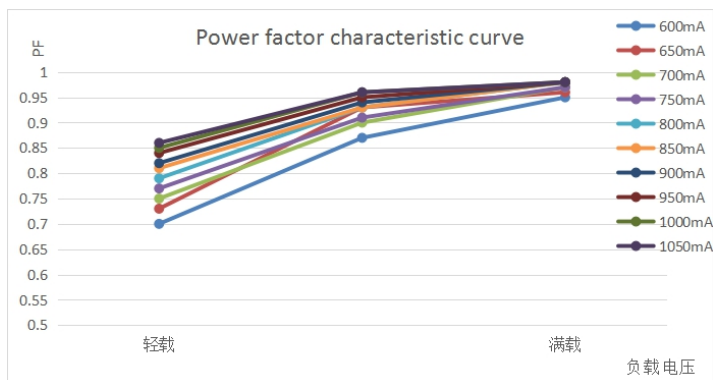


【Parameter Curve】

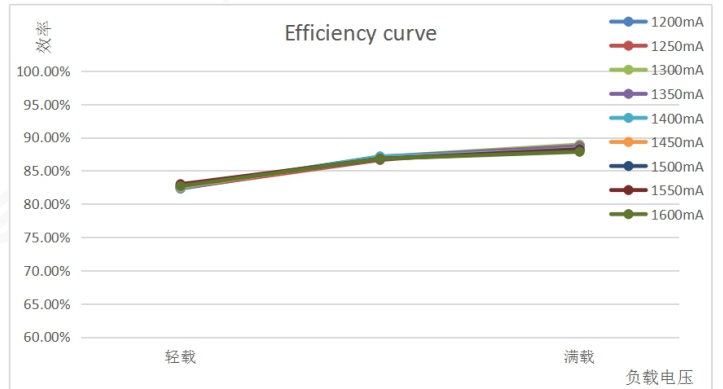
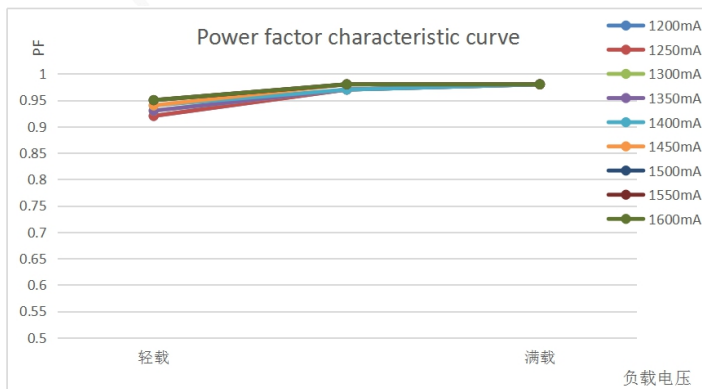
MLC25C-PS



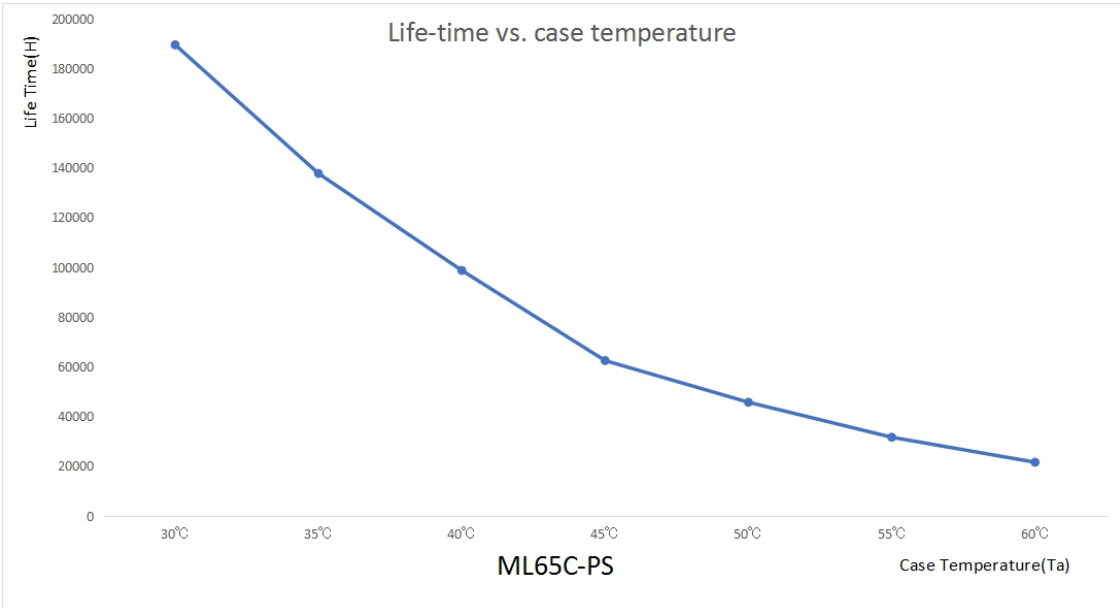
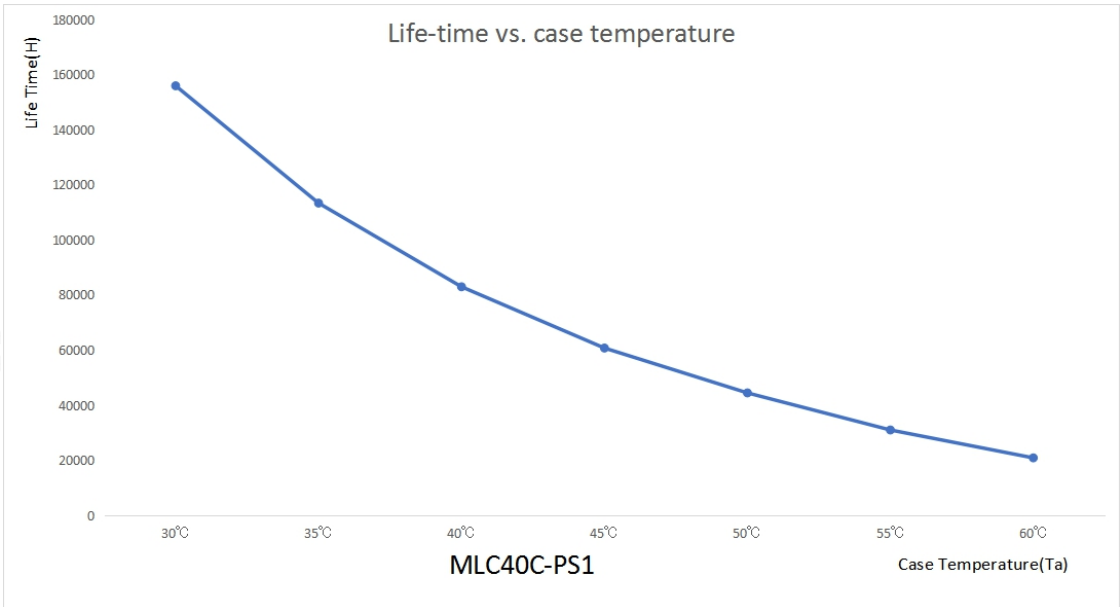
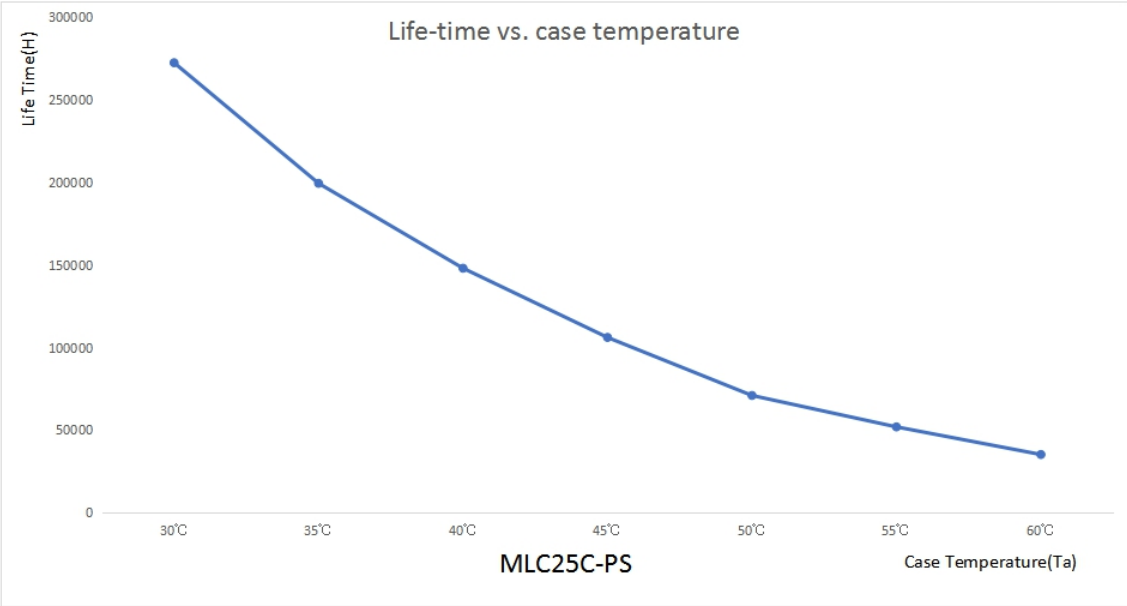
MLC40C-PS1



MLC65C-PS



Life Time Curve



【Output Current Setting】

● MLC25C-PS

Output current	Voltage range	S1	S2	S3	S4
300mA	9-42V	-	-	-	-
350mA	9-42V	-	-	-	ON
400mA	9-42V	-	-	ON	-
450mA	9-42V	-	-	ON	ON
500mA	9-42V	-	ON	ON	-
550mA	9-42V	-	ON	ON	ON
600mA	9-42V	ON	-	ON	ON
650mA	9-38V	ON	ON	ON	-
700mA	9-36V	ON	ON	ON	ON

● MLC40C-PS1

Output current	Voltage range	S1	S2	S3	S4
600mA	9-42V	-	-	-	-
650mA	9-42V	-	-	-	ON
700mA	9-42V	-	-	ON	-
750mA	9-42V	-	-	ON	ON
800mA	9-42V	-	ON	-	ON
850mA	9-42V	-	ON	ON	-
900mA	9-42V	-	ON	ON	ON
950mA	9-42V	ON	ON	-	ON
1000mA	9-40V	ON	ON	ON	-
1050mA	9-38V	ON	ON	ON	ON

● MLC65C-PS

Output current	Voltage range	S1	S2	S3	S4
1200mA	15-42V	-	-	-	-
1250mA	15-42V	-	-	-	ON
1300mA	15-42V	-	-	ON	-
1350mA	15-42V	-	-	ON	ON
1400mA	15-42V	-	ON	ON	-
1450mA	15-42V	-	ON	ON	ON
1500mA	15-42V	ON	-	ON	ON
1550mA	15-42V	ON	ON	ON	-
1600mA	15-40V	ON	ON	ON	ON

【Initialization】

When powered on, it is steady on. When the sensor is configured, it changes according to the status of the sensor.

【Default Setting】

Adjust the corresponding current gear according to the order or customer demand.

【Application Notice】

- Please use this product in accordance with the specifications. Failure may occur if the product is used beyond the use conditions.
- The product should be installed by a professional electrician. Please turn off the power before installing, wiring, changing the setting of the DIP switches.
- The load LED string must be connected first, and then turn on the input power, otherwise it may damage the LED string.
- After the LED drive input is powered off, there will be residual voltage at the output end, which can be maintained for about 3 minutes.