

AIDE Energy's Solar LED Lighting System

Aide Energy (Cayman) Holding Co., Ltd.

Flink Chiu

Sep 5, 2013

Table of Contents

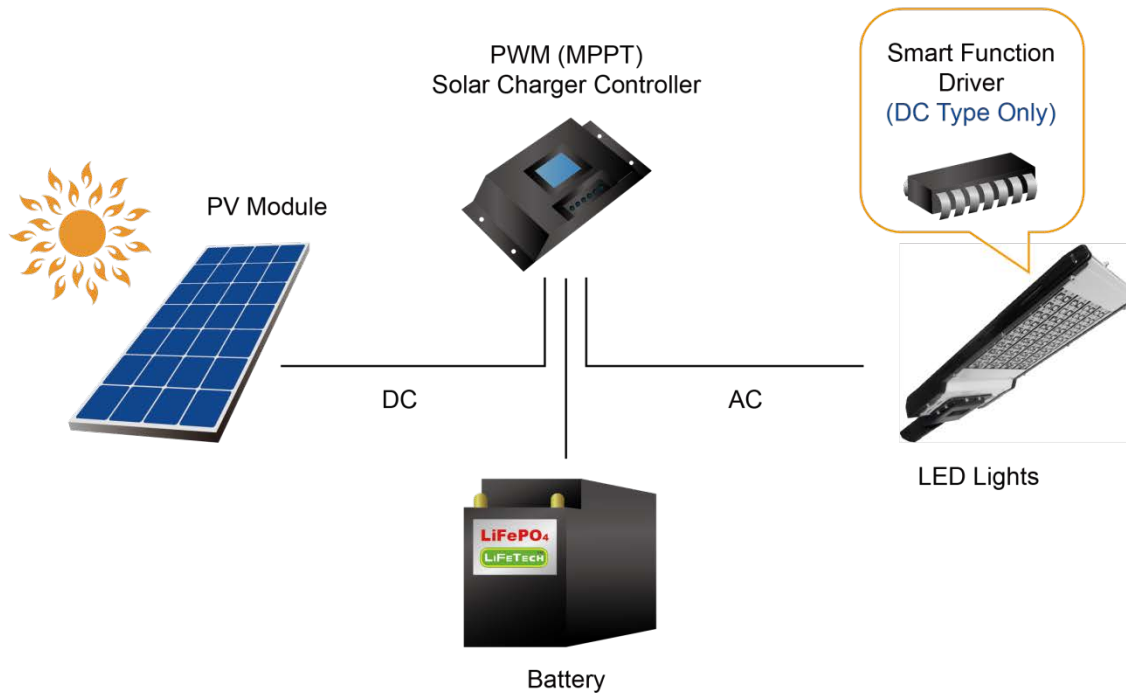
- ▶ Application for Solar LED System
- ▶ Application Photograph of Solar LED System
- ▶ The Composition of Solar LED System
- ▶ Types of Solar LED System
- ▶ Characteristics of Solar LED System
- ▶ Specification Reference

- **Lights for rural areas without utility**
- **Lights for community without cables**
- **Green energy**

● The application way of solar LED will be...

- Street or Road
- Community
- Factory
- Garden



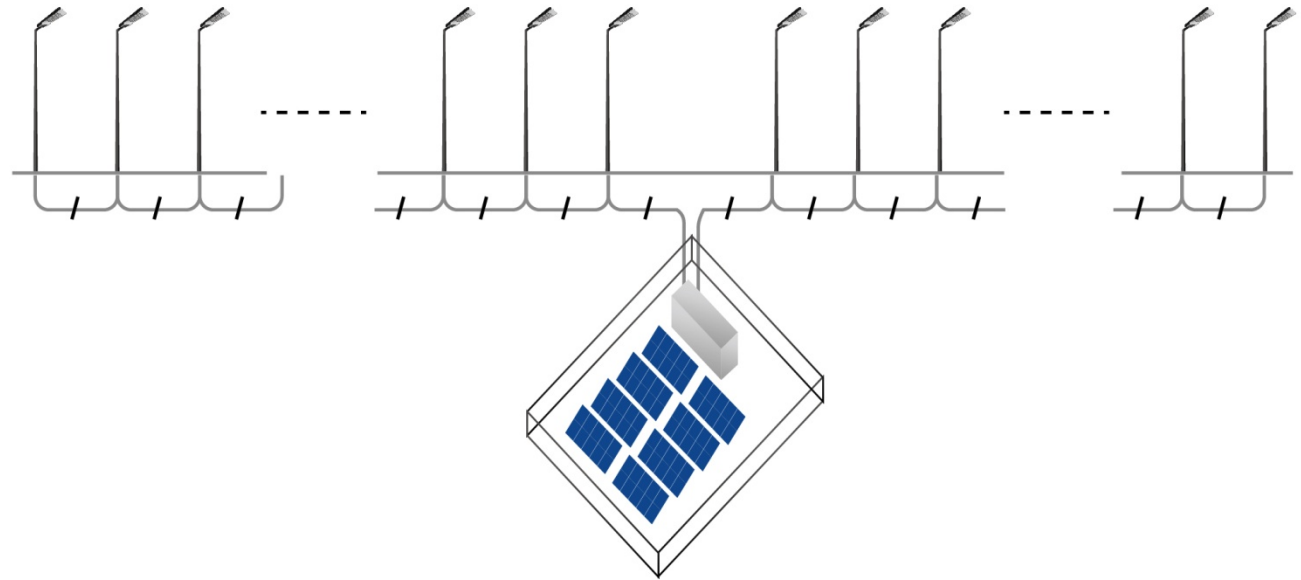


NO	Item
1	PV Modules
2	PWM or MPPT Solar Charger Controller
3	Smart Function Driver (DC type only)
4	Battery

- The system can generate and supply electricity independently.



Stand-alone (DC Type)



Small Station (AC Type)

- To supply electricity for lights
- No need to install cables to connect with the grid in a long distance
- Battery is necessary
- It's a stand-alone system
- Higher system stability (compared with generator)

● Specification of Solar LED **Street Lighting System**

	Design 1	Design 2	Design 3	Design 4	Design 5
LED Light (W)	60	80	120	150	180
Daily Consumption of Lights (W*12hrs)	720 Wh	960 Wh	1,440 Wh	1,800 Wh	2,160 Wh
PV Module(W) \geq	192	256	384	480	600
Battery Capacity (Wh)	2,400	3,600	4,800	6,000	7,200
DOD (Depth of Discharge)	30%	27%	30%	30%	30%
Life Expectancy of Battery (year)	3.8	4.2	3.8	3.8	3.8
The Extension of The Durability During Cloudy Days While The Smart Charge Controller is Turned-on (days)	4.3	4.8	4.3	4.3	4.3

● Specification of Solar LED **Garden Lighting System**

	Design 1	Design 2	Design 3
LED Light (W)	10	15	30
Daily Consumption of Lights (W*12hrs)	120 Wh	180 Wh	360 Wh
PV Module(W) \geq	32	49	96
Battery Capacity (Wh)	600	900	1,200
DOD (Depth of Discharge)	20%	20%	30%
Life Expectancy of Battery (year)	3.8	4.2	3.8
The Extension of The Durability During Cloudy Days While The Smart Charge Controller is Turned-on (days)	6.4	6.4	4.3

