Road Smart

Solar Star Light - II

- Panels Power: 60W - 260W
- Lumen: 6000LM - 25000LM



www.roadsmartsolar.com

Integrated Structure Design



ST2-60



ST2-80



ST2-120



ST2-160

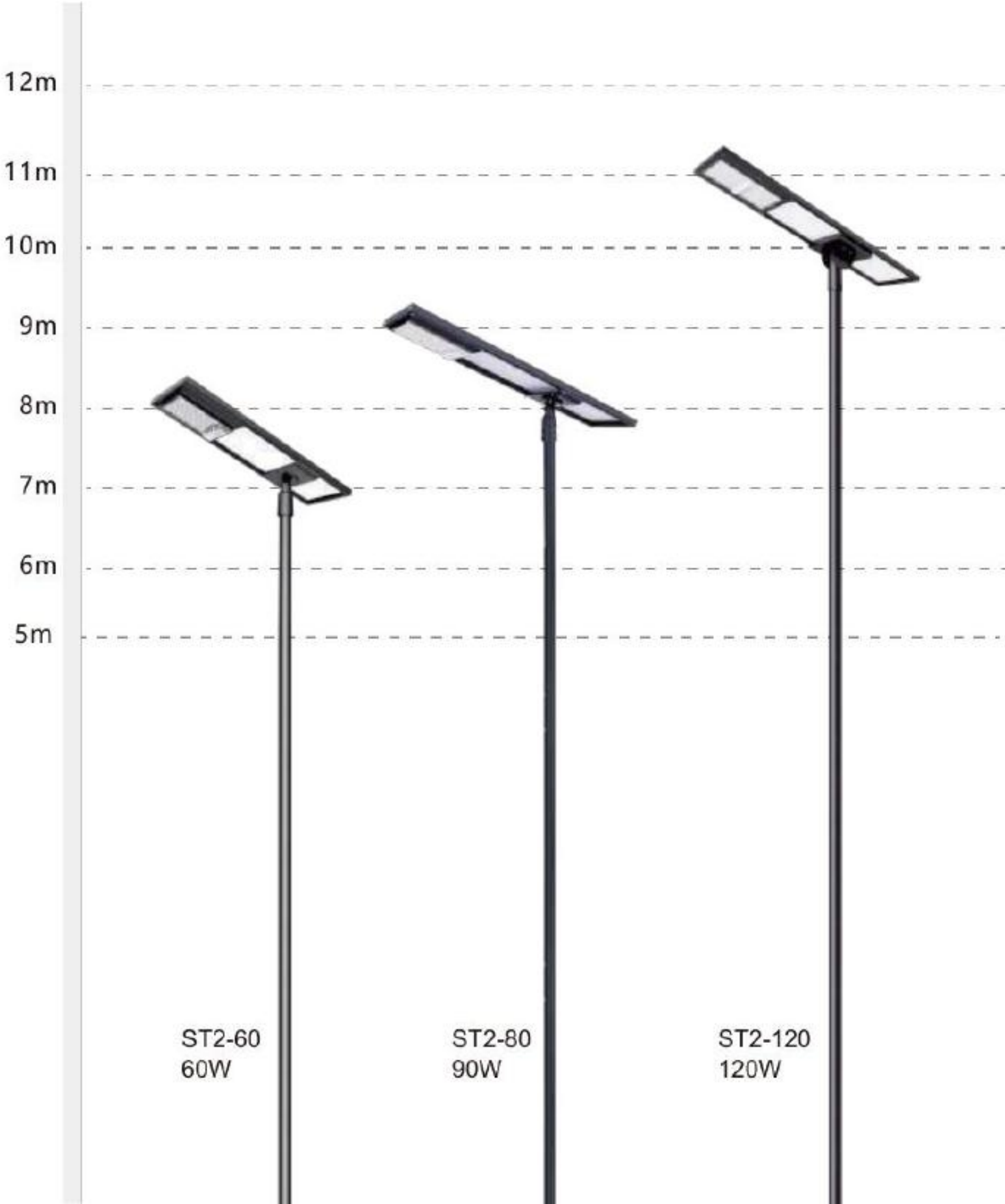


ST2-210



ST2-260

Lamp post installation height recommendation diagram




15m
14m
13m
12m
11m
10m
ST2-160
160W
ST2-210
210W
ST2-260
260W

Advantage


Hollow shell design
Timely heat dissipation,
extend lifetime
Indicator light status
Mono solar panel
24% efficiency
Anti-corrosion
Aluminum shell
High efficiency LED chips
Rotating holder, fit different
angle's installation
Batwing lens with
professional
light distribution
Built-in microwave radar
sensors,saving power,
lighting time longer

Hollow shell design

Timely heat dissipation, extend lifetime



Core Technologies

3.2V MPPT Technology

Due to variance in cell capacity, internal resistance and voltage, a faulty cell shortens the lifespan of 12V/24V multi-string battery packs. 3.2V MPPT avoids this issue; single-cell faults will not affect the whole pack. It lowers battery failure risks by 75% versus 12V systems and quadruples service life with superior stability.

Multi-Peak MPPT

RoadSmart new patent solar controller adopts multi-peak MPPT technology, which can timely track the maximum power point and improve the conversion efficiency of solar panels. Charging efficiency increase 20% compare with normal MPPT.

IPC 5.0 Technology

Through 15 years' experience, RoadSmart upgraded highly precise 5.0 version IPC technology (intelligent power control 5.0). It will intelligently detect recent weather conditions, reasonably plan the discharge power to achieve 3-5 rainy. days work.

ICD Technology (Intelligent Charge and Discharge)

Using Grade A LiFePO4 battery with excellent safety performance. RoadSmart's unique current equalization and dual protection (software and hardware) enable the battery's capacity remains at 90% after 2000 cycles. Lifetime is 4 times longer than that of lead-acid batteries.

Intelligent high-efficiency lamp chips

Equipped with high-luminous-efficiency LED chips to optimize brightness; the overall lighting efficiency is greater than 160 LM/W.

Professional light distribution design

Equipped with patented lens to make the irradiation area more uniform.

Rotating angle design

The illumination area and angle of light can be adjusted reasonably according to the width of the road.

Modular design

Modular design of battery and LED chip, transportation, installation and maintenance are more economical and simple.

Remote Control

ST2-60/ST2-80/ST2-120/ST2-160

- DEMO: No matter day or night, light "on" for 1 minute. Only for test use
- OFF: Light "off", no matter day or night
- L: At night, 100%-2hrs, 70%-3hrs, 20%-dawn
- T: At night,100%-3hrs, 50%-2hrs, 20%-6hrs, 50% brightness 1hr before sunrise
- M: At night,100% light when people come, 20% standby after 20 seconds
- U: At night, 100%-3hrs, 50%-3hrs(Highlight mode)

ST2-210/ST2-260

- DEMO: No matter day or night, light "on" for 1 minute. Only for test use.
- OFF: Light "off", no matter day or night.
- L: At night, 100%-2hrs, 70%-2hrs, 30%-dawn.
- T: At night,100%-3hr, 50%-2hrs, 20%-6hrs, 50% brightness 1hr before sunrise
- M: At night, 50%-1hr, 100%-3hrs, 30%-dawn.
- U: 100%-1hr, 70%-3hrs, 20%-dawn

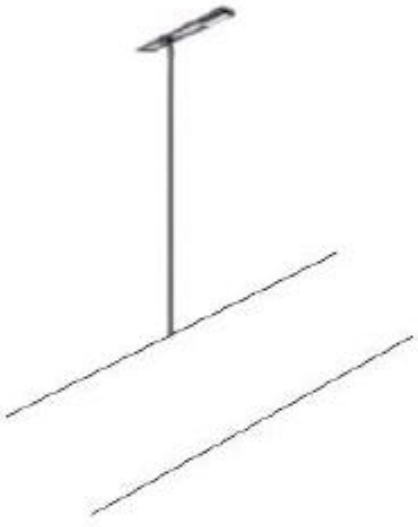


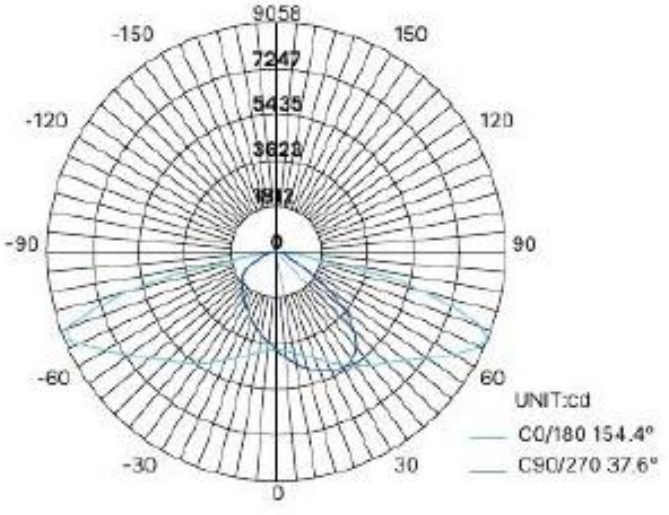
Note:

1. Default is L mode, once a certain mode was set successfully, it will be reserved until you change other modes with remote control.
2. U Highlight mode: Increase 30% on the original basis, mean 3H-130%, 3H-80%.

Light Distribution

Luminous intensity distribution curves.





AVERAGE BEAM ANGLE(50%): 96.0 DEG

Indicator light status instructions

ST2-60/80/120/160

LED	Indications	Status	Functions
• Blue	Charging indication	Long-term on	During the day, it's not charging
		Slow twinkling	Be Charging
		Long-term off	Night
• Red	Battery indication	Long-term on	Battery works normally
		Long-term off	Battery is not connected/No power
		Fast twinkling	Battery is over discharged
		Slow twinkling	Battery full charged
• Green	Load indication	Long-term on	Load is on
		Long-term off	Load is off

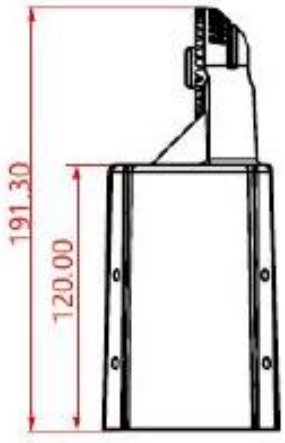
ST2-210/260

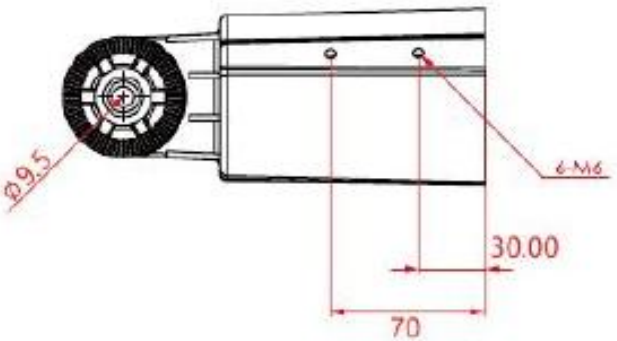
LED	Indications	Status	Functions
• Blue	Charging indication	Long-term on	Be Charging
		Long-term off	Solar panel voltage is lower than battery voltage/Battery full charged
• Red	Battery indication	Long-term on	Battery works normally
		Long-term off	Battery is not connected/No power
		Fast twinkling	Battery is over discharged
		Slow twinkling	Battery full charged
• Green	Load indication	Long-term on	Load is on
		Long-term off	Load is off

Dimension

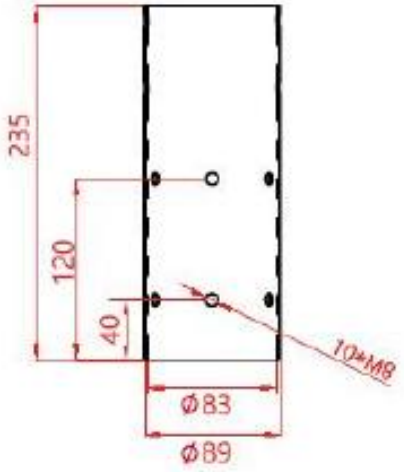
Sleeve depth

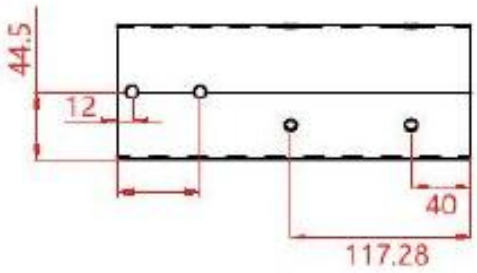
ST2-60/80



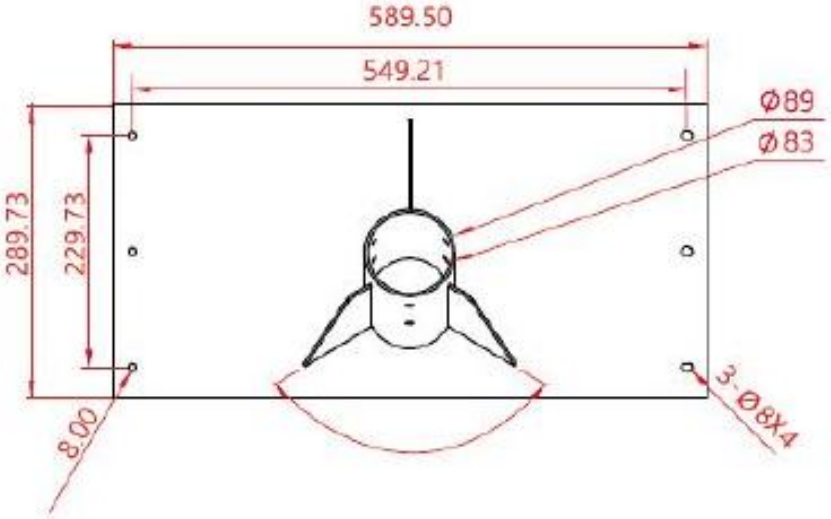


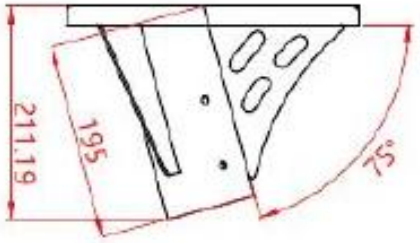
ST2-120



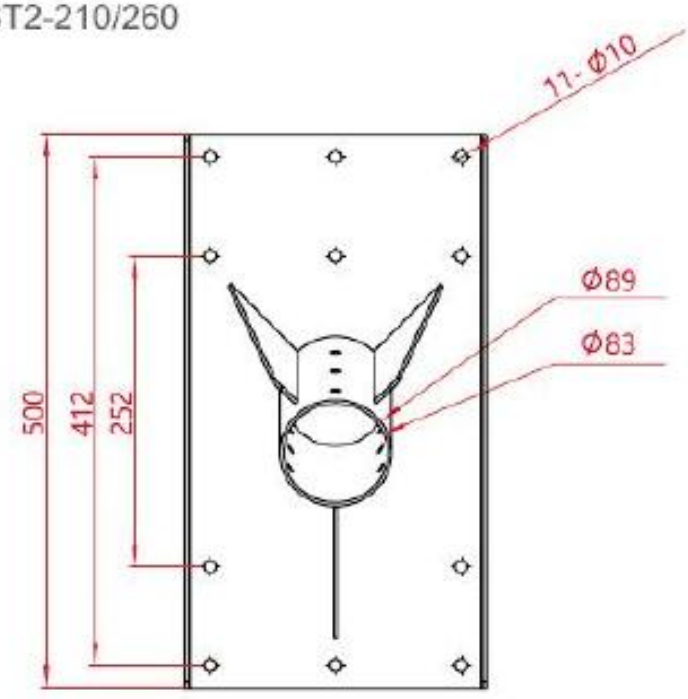


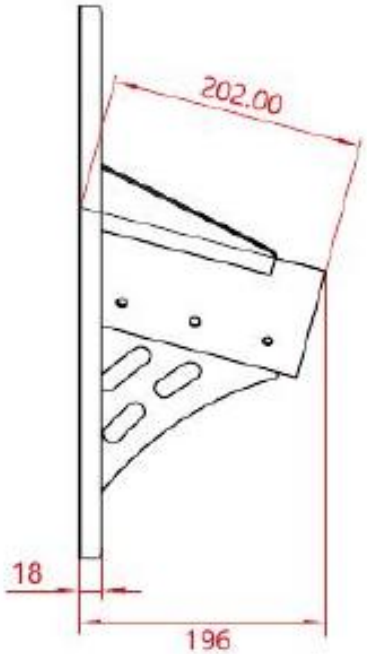
ST2-160

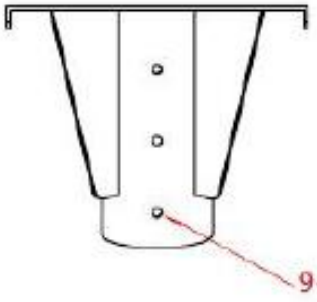


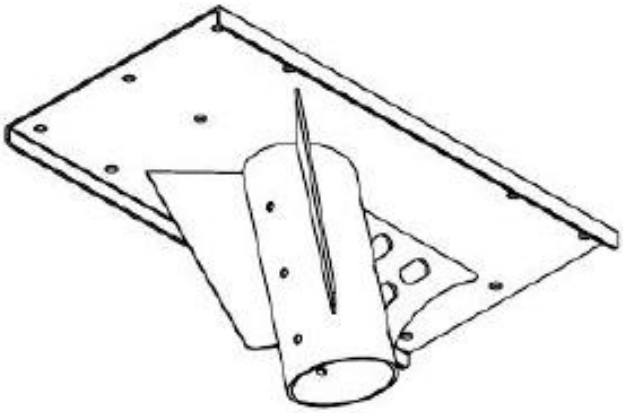


ST2-210/260



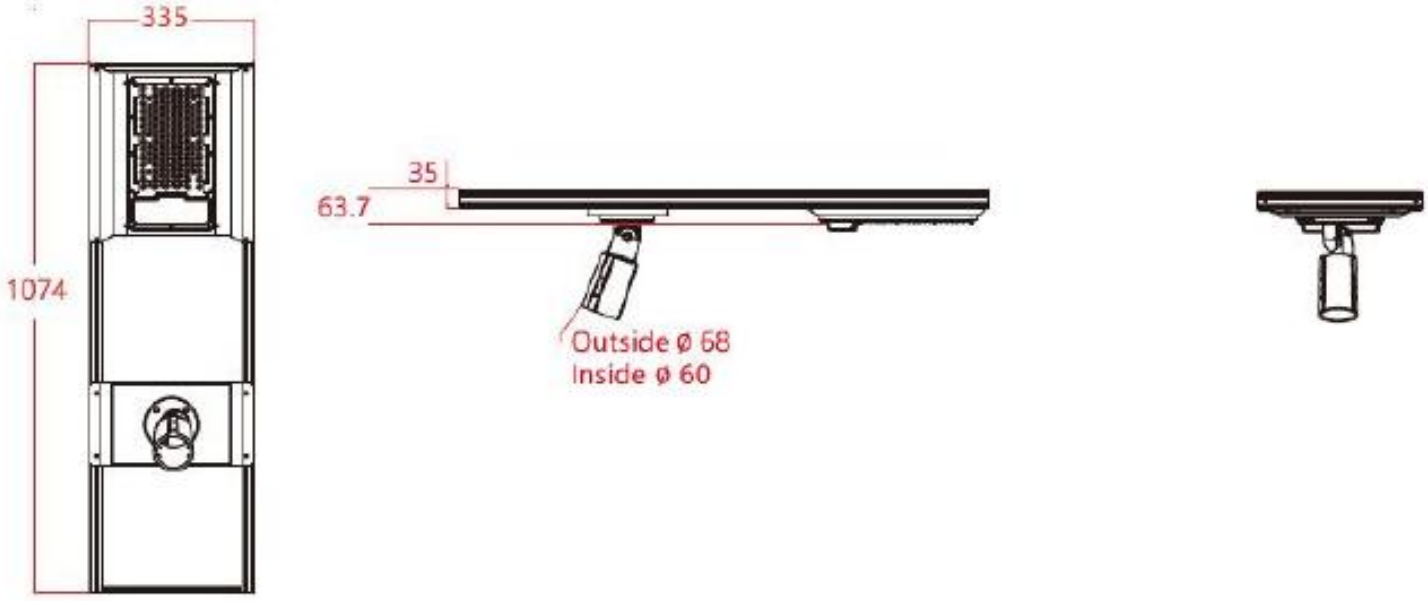




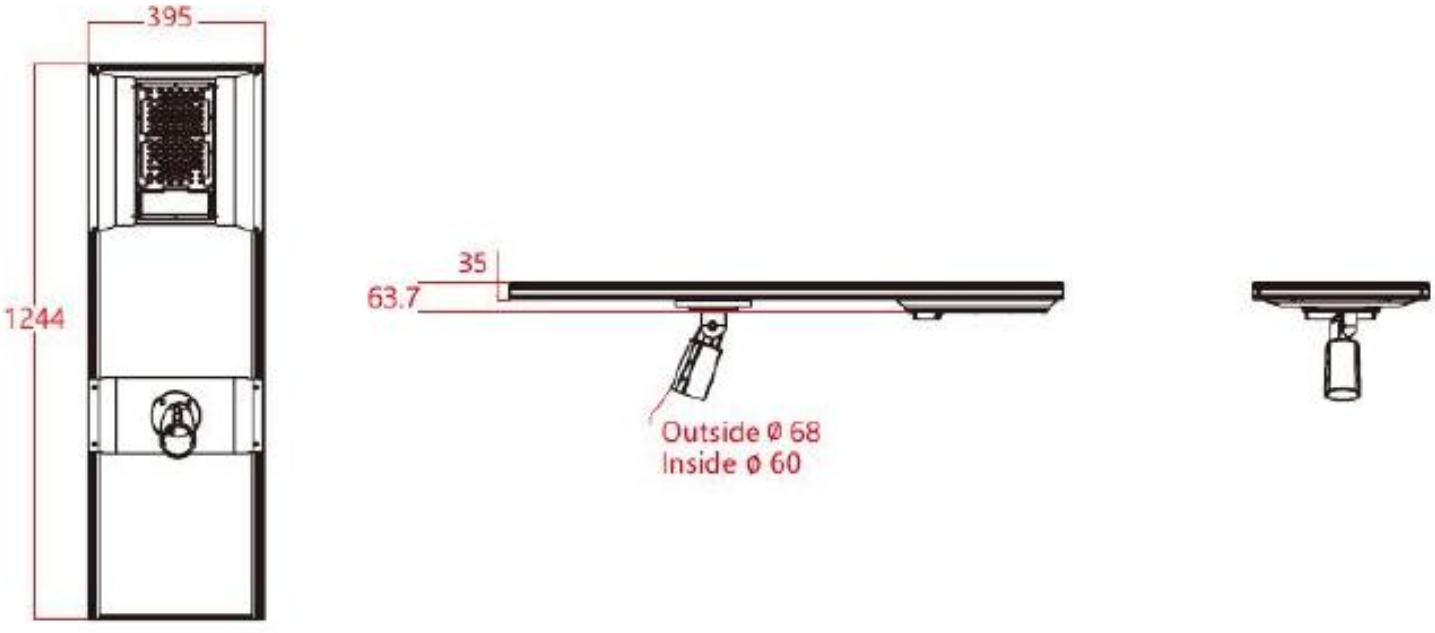


Lamp size

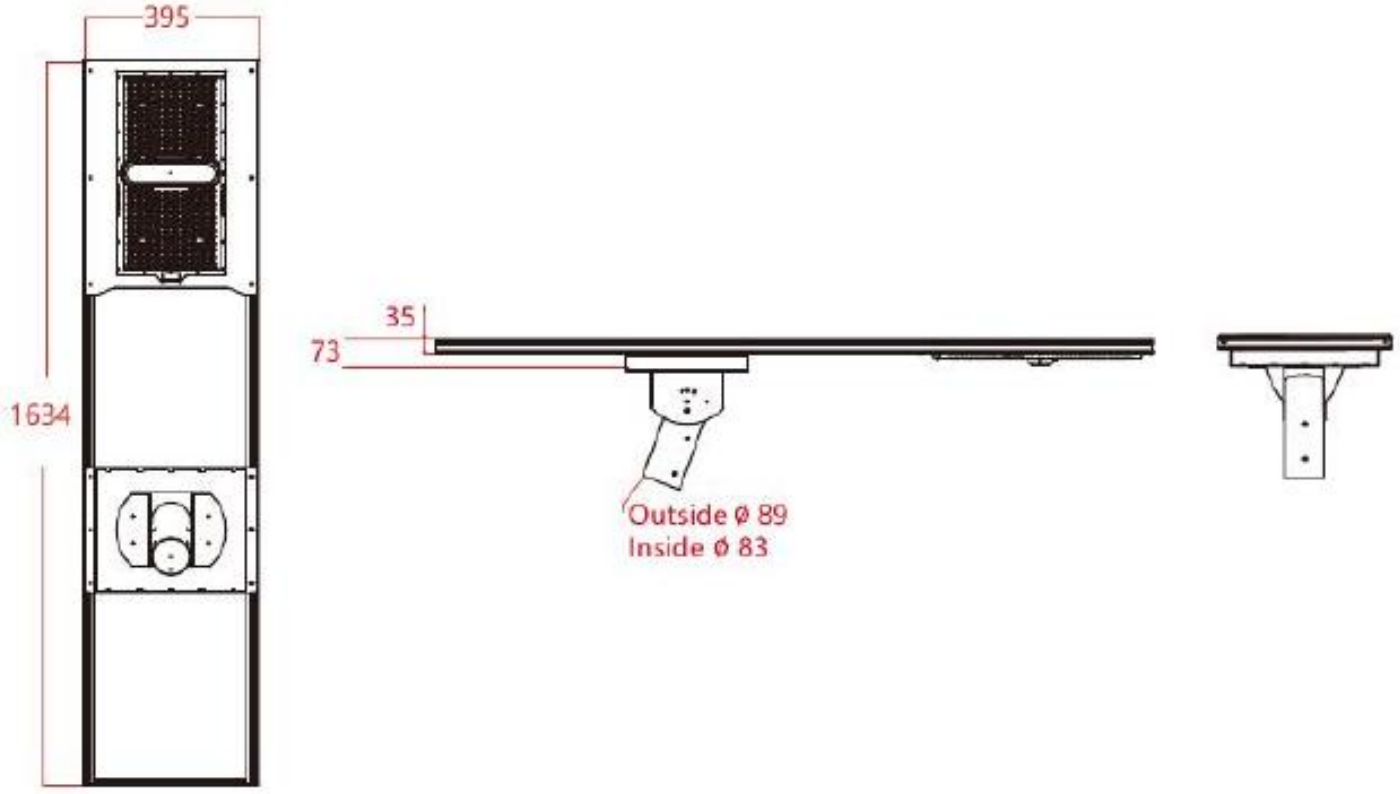
ST2-60



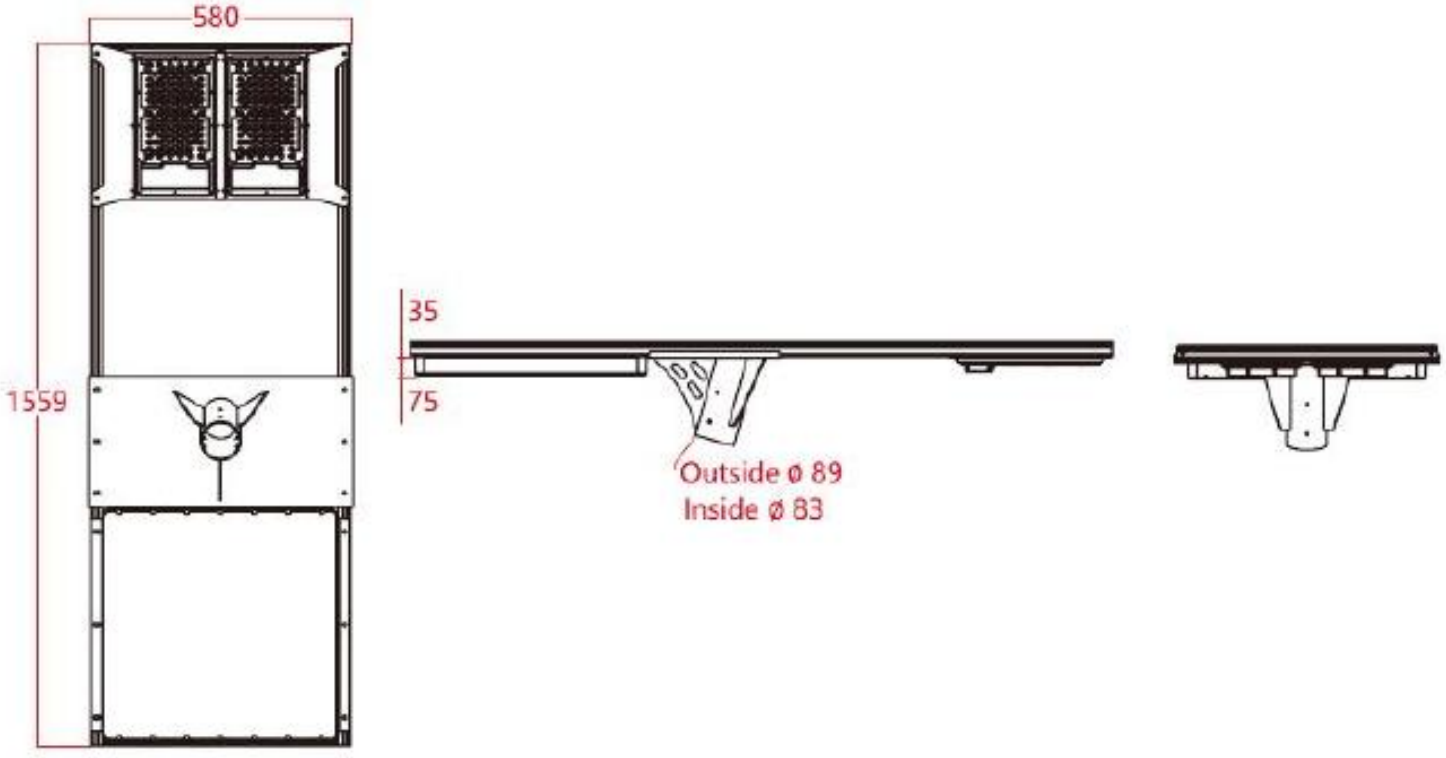
ST2-80



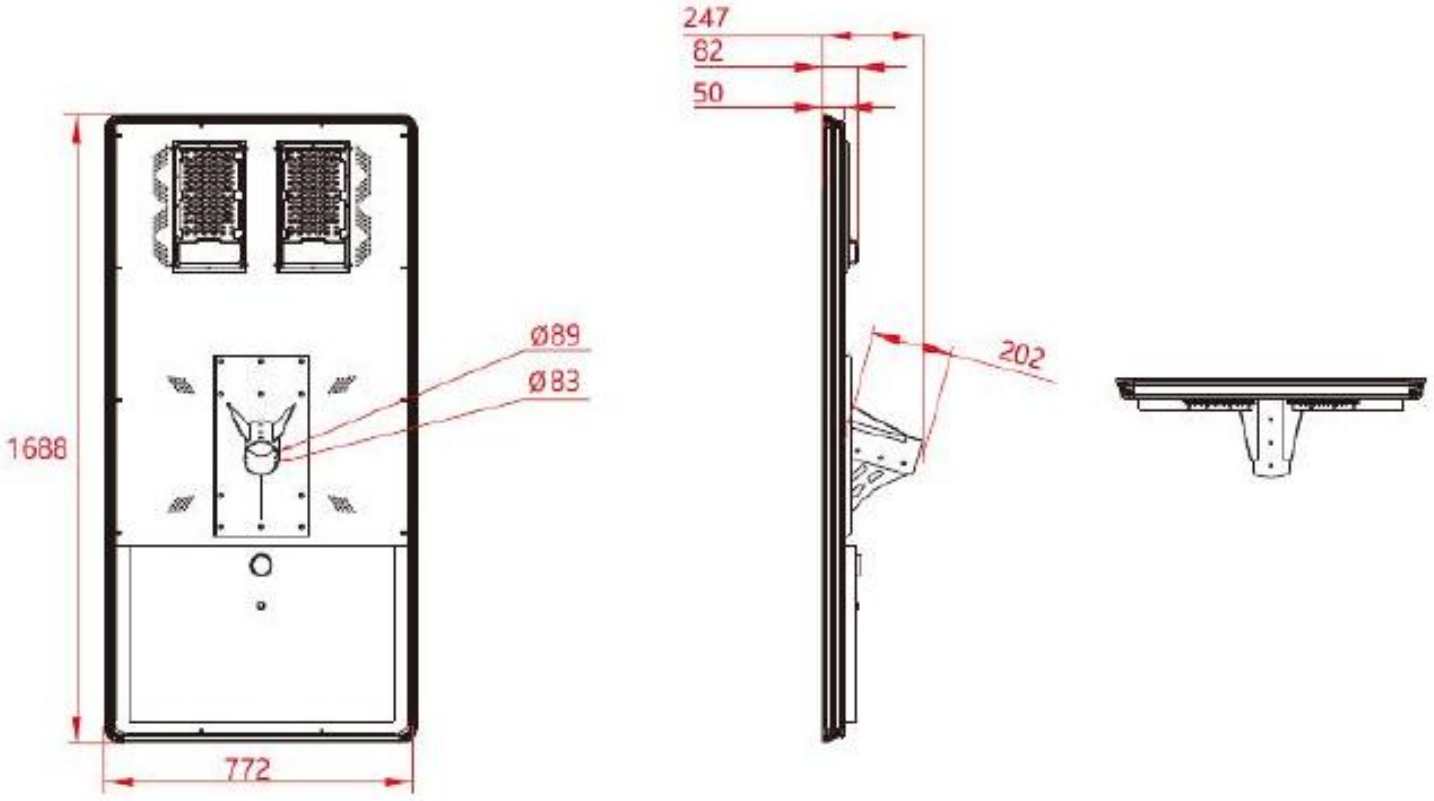
ST2-120



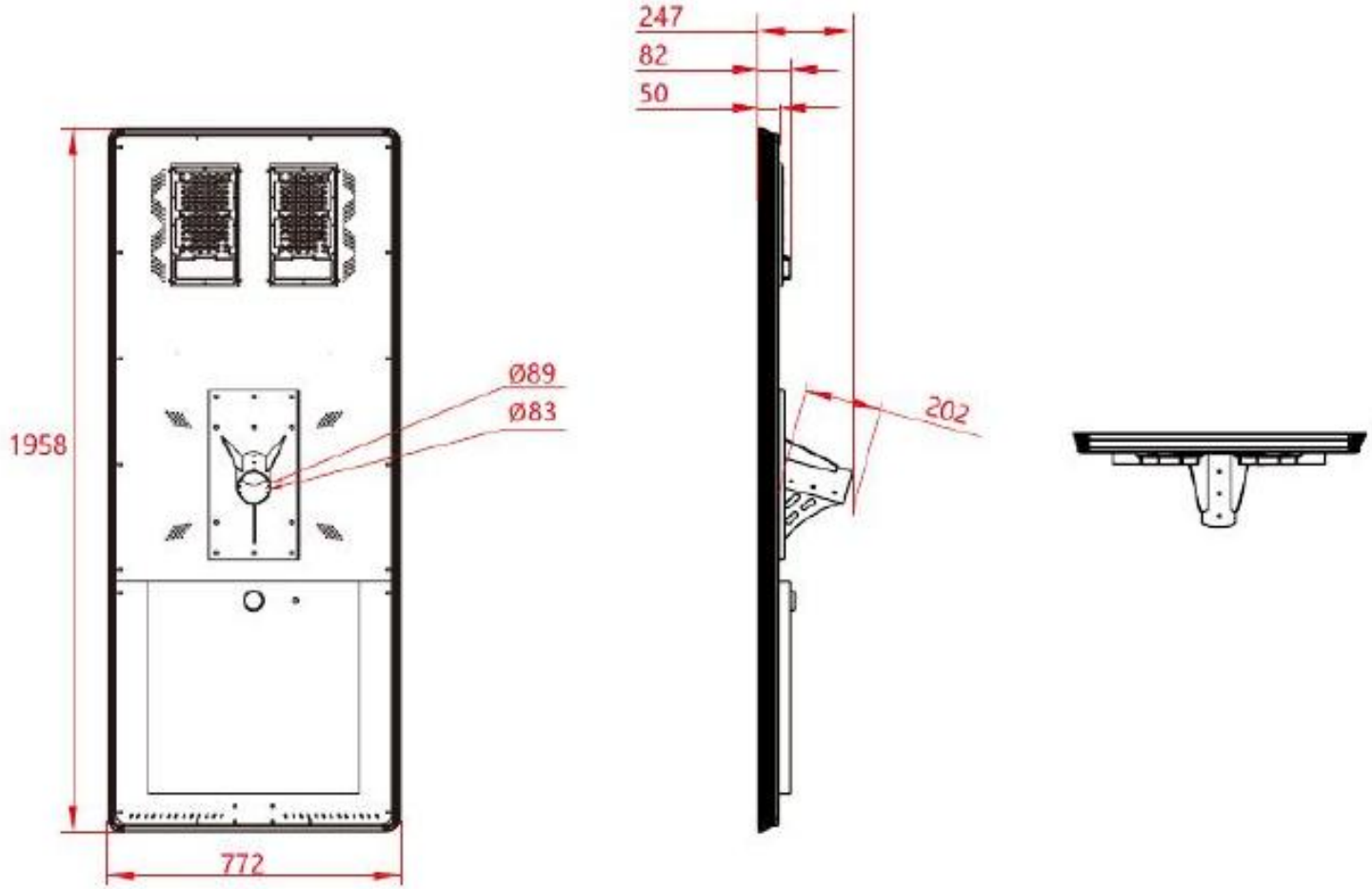
ST2-160



ST2-210



ST2-260



Parameter

Type	ST2-60	ST2-80	ST2-120
Lamp head			
LED chip	140pcs		240pcs
Luminous flux	6000lm	10000lm	15000lm
Beam angle	150*70°		
Lifespan	50000hrs		
IP Rating	IP65		
Working temperature	-20°C~60°C (Charge above 0°C)		
Color temperature	3000-7500K		
CRI	Ra≥70		
SOLAR PANEL			
Power	60W	90W	120W
Voltage	18V		
Solar cell efficiency	22%-24%		
Material	Monocrystalline silicon		
BATTERY			
Capacity	240WH/75AH	384WH/120AH	640WH/200AH
Lighting time(full charged)	5-7 rainy days		
Lithium battery	LiFePO4		
INSTALLATION			
Top diameter of pole	60 mm		76 mm
Mounting height	6-7M	6-8M	8-10M
Installation spacing	20-40M		

Type	ST2-160	ST2-210	ST2-260
Lamp head			
LED chip	280pcs		
Luminous flux	18000lm	21000lm	25000lm
Beam angle	150*70°		
Lifespan	50000hrs		
IP Rating	IP65		
Working temperature	-20°C~60°C (Charge above 0°C)		
Color temperature	3000-7500K		
CRI	Ra≥70		
SOLAR PANEL			
Power	160W	210W	260W
Voltage	18V		
Solar cell efficiency	22%-24%		
Material	Monocrystalline silicon		
BATTERY			
Capacity	960WH/300AH	1536WH/480AH	1920WH/600AH
Lighting time(full charged)	5-7 rainy days		
Lithium battery	LiFePO4		
INSTALLATION			
Top diameter of pole	76 mm		
Mounting height	10-12M	10-12M	10-15M
Installation spacing	20-40M		

Application







