



# OFF-GRID LED SOLAR STREET LIGHT 60W/120W/180W/240W

The features of this solar street light is a semi-split design. The light engine and battery are built right into the LED fixture, the lamp body is separated from the solar panel. No need for a power source which eliminates the need for wiring and trenching.



- Fully programmable via solar controller and photo control
- Built-in battery and solar controller
- Advanced new LiFePO4 battery lasts at least 2000 charge cycles and will last three nights with one day charge
- Perfect for street , parks, parking lots, school campuses, etc.
- Dimensions (L x W x H):
  - 60W 503\*169\*85mm
  - 120W 568\*210\*75mm
  - 180W 659\*250\*79mm
  - 240W 734\*300\*95mm

		CHARGE TIME	BATTERY LIFE	BATTERY	OPERATING TEMP	BEAM ANGLE	REPLACEABLE	RATED LIFE	WARRANTY



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**NELSON SOLAR**  
BP 6635 Ouagadougou CNT Ouaga  
BURKINA FASO  
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**PRODUCT SPECIFICATION**

Model	0335A60-01	0335B120-01	0335C180-01	0335D240-01
LED Type	60PCS 5050LED	120PCS 5050LED	180PCS 5050LED	240PCS 5050LED
Battery Type	LiFePO4 12,8V/36AH	LiFePO4 12,8V/48AH	LiFePO4 12,8V/54AH	LiFePO4 12,8V/60AH
Solar Panel Type	Polycrystalline 64W/18V	Polycrystalline 90W/18V	Polycrystalline 120W/18V	Polycrystalline 150W/18V
LED Lumen	160lm/w			
Color Temperature	3000K-6500K			
LED Lifespan	50000H			
Operating Temperature	-20°C~60°C			
Storage Temperature	-30°C~70°C			
IP Rating	IP65			
Product Size	503*169*85mm	568*210*75mm	659*250*79mm	734*300*95mm

**PRODUCT DETAILS**

**NO.1**

**Polycrystalline Solar Panel**

22% photoelectric conversion efficiency.

**NO.2**

**Bridgelux LED Chips**

High brightness. High light efficiency, low light decay.

**NO.3**

**Adjustable Angle**

0°-180° Adjustable Angle  
Adjustable Angle for better solar charging and lighting



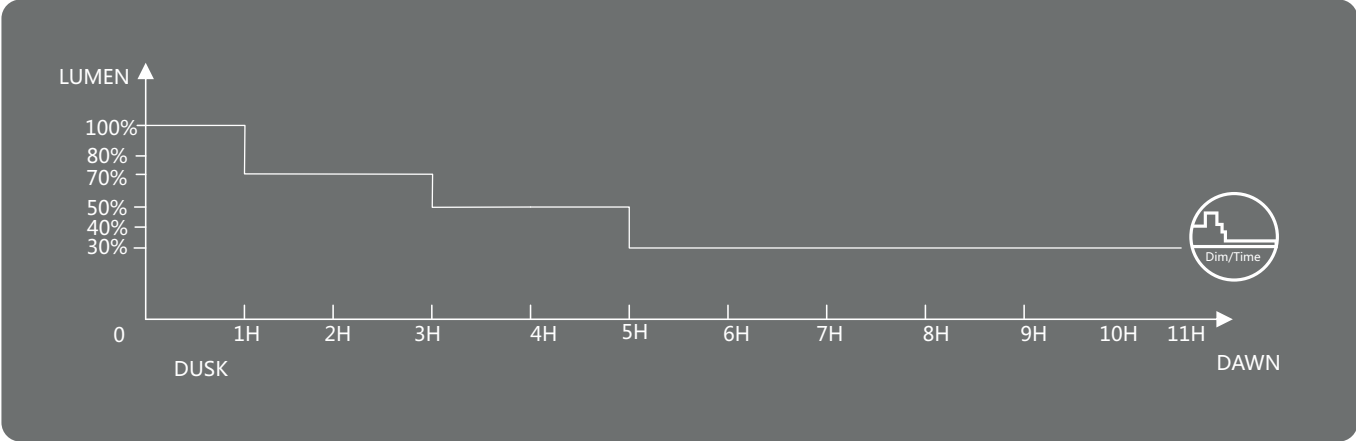
Auto charge at daytime



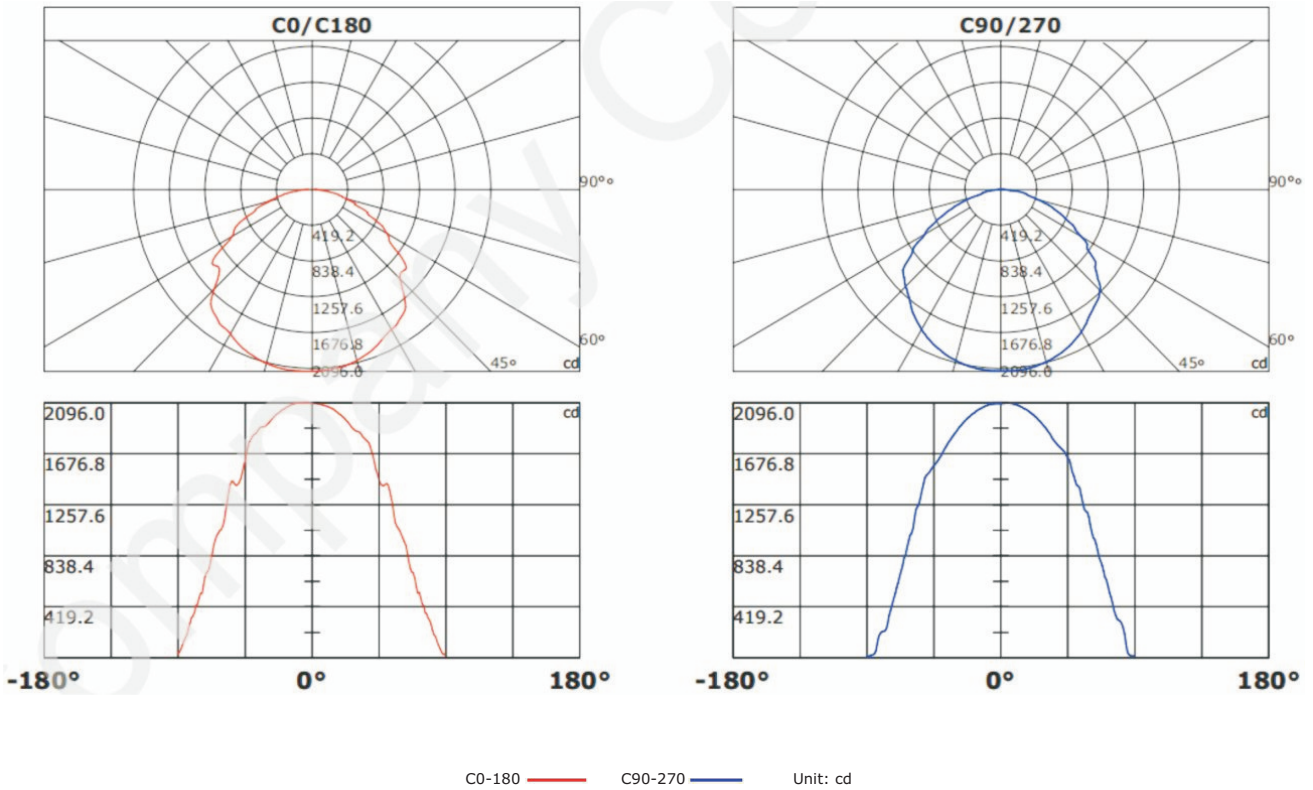
Auto light at night

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**HOW THE LIGHT WORKS**

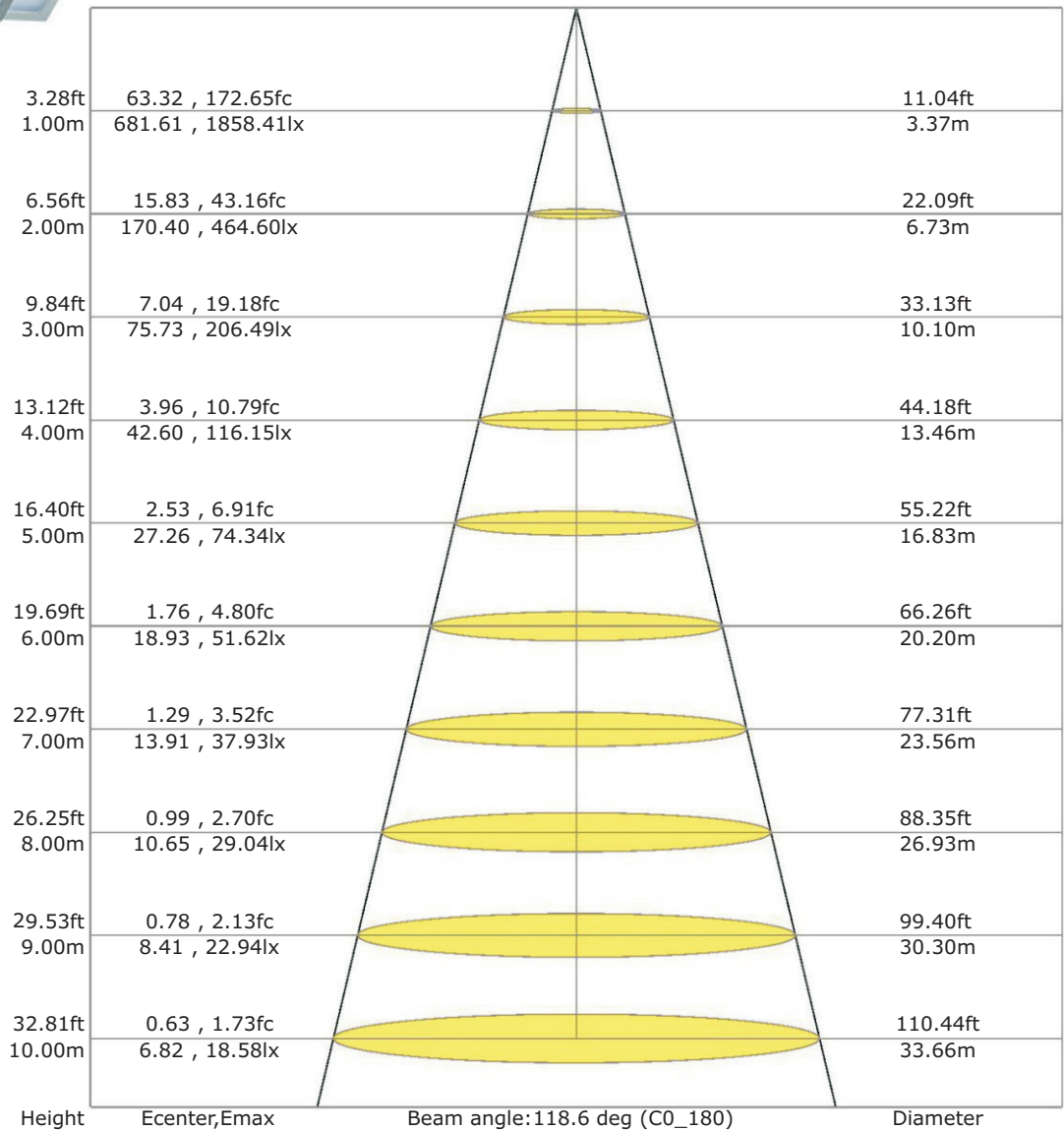
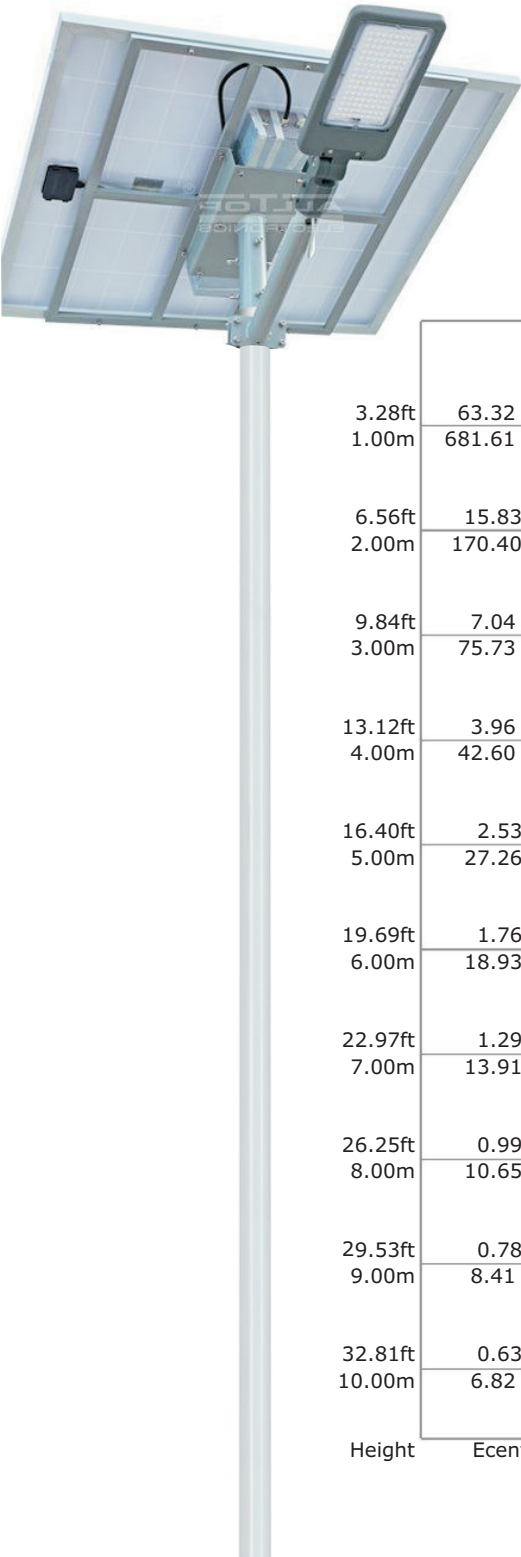


**PHOTOMETRICS**

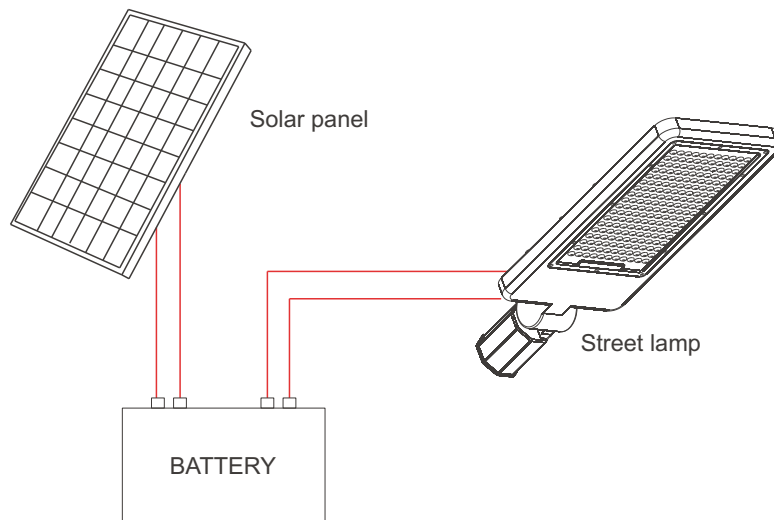
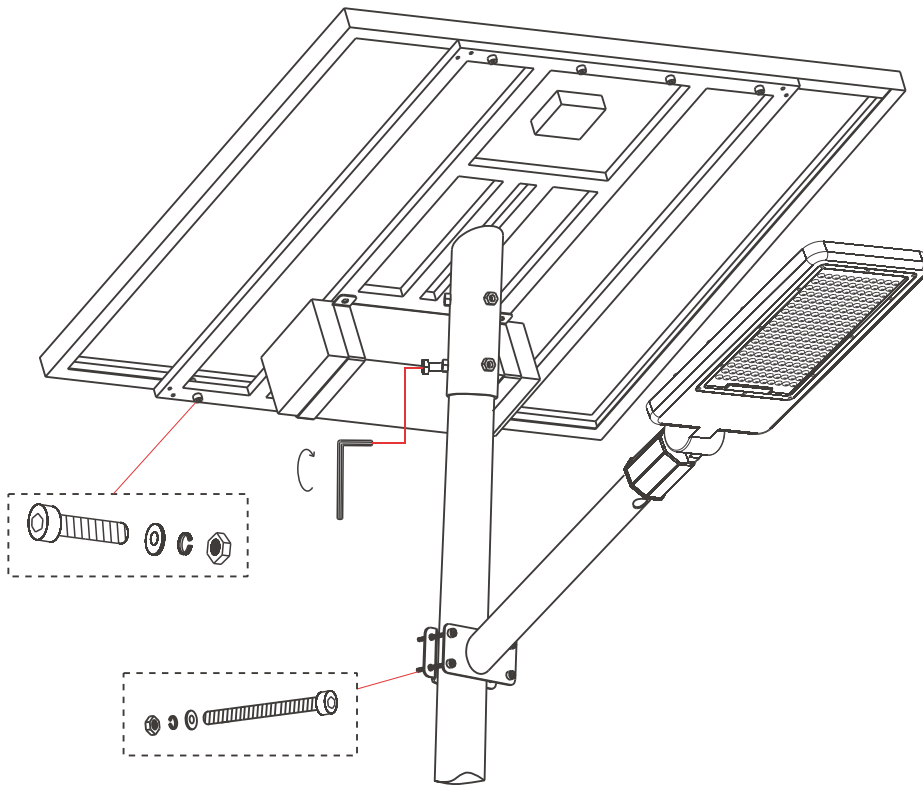


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LX-DISTANCE DIAGRAM







**BATTERY SPECIFICATION**

DesignLife	6-8 years			
Nominal Voltage	12,8V			
Nominal Capacity	36Ah	48Ah	54Ah	60Ah
Self-Discharge				
3% of capacity declined per month at 20°C(average)				
Operation Temperature Range				
Discharge	-20~60°C			
Charge	-10~60°C			
Storage	-20~60°C			
Max.Discharge Current 77°F(25°C)	1200A(5s)			
Short Circuit Current	3000A			

**BATTERY GUARANTEE OF QUALITY**



**No.1 Battery Cells**

High-end battery cells keep every cell's voltage, resistance, capacity, discharging always in sync



**No.2 Battery Protector**

High precision IC keep performance more stable protect over load , over charge ,over discharge ,short circuit ,over voltage ,over current keep battery pack always safe and long life span



**No.3 Precision Welding Machine**

Fully automatic precision welding machine can ensure that every battery can be welded firmly to prevent the danger of short circuit or power failure



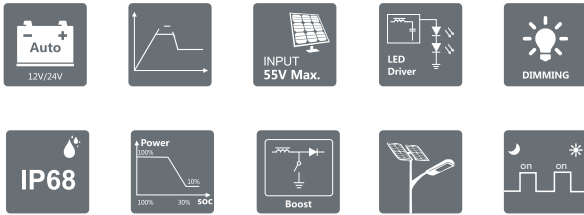
**No.4 Aging Test Machine**

every battery pack need to thorough charging and discharging test by the aging test machine to keep 100% qualified

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**MPPT SPECIFICATION**

**Intelligent Wireless solar Charge Controller  
With Step-Up LED Driver**

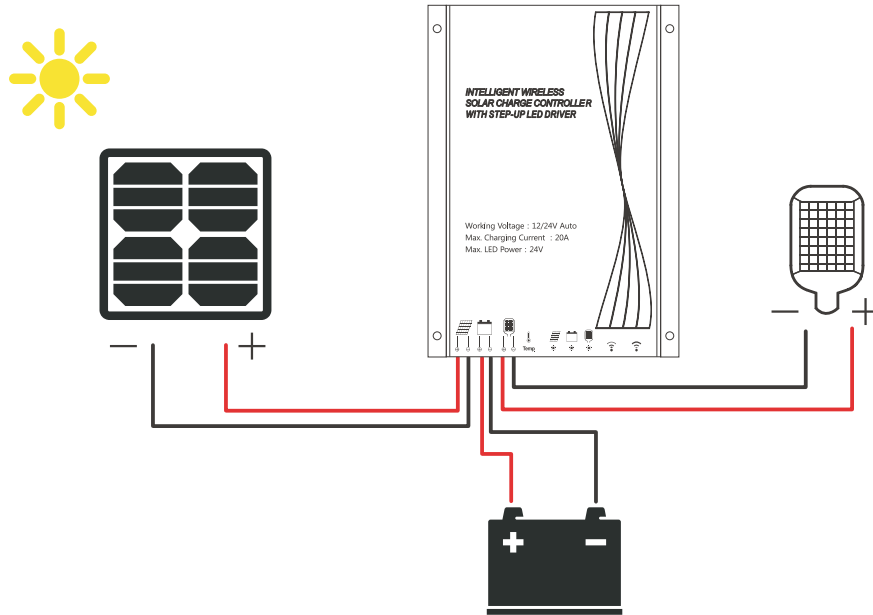


**MPPT MAIN FEATURES**




1. New design of wireless remote-control can modify the controller parameter and read the system message according to the handheld device.
2. Digital high precision constant-current control, the maximum efficiency can reach 96%.
3. The working current can be adjusted from 0.15A to 3.96A, the regulating precision is 30mA.
4. High dynamic performances of load insure current output stability even though the battery voltage and load sudden change.
5. 3 section time frame dimming function design, work time can be set range from 0h to 15 hours, power can be set range from 0% to 100%.
6. Intelligent power mode, the load power can be adjust automatically according to the battery power, can extend the maximum working time of the battery.
7. Record the system status, can record at a max 7days and monitor the whole system.
8. The true constant current but not limited the current, insure the current output stability thus decrease LED light failure, increase the LED service life.
9. Metal case, IP68 waterproof degree, can suitable use in all kinds of bad conditions.
10. With modified calculation of charging, the charging efficiency is improved, which lengthen the using time of solar energy.
11. Overheat preventing function, above a certain temperature will decrease the load or close the load.
12. Varies system protection function. Including the battery reverse connection, LED short circuit, open circuit protection and so on.

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**MPPT WIRING GUIDE**



**MPPT STATUS INDICATION**

LED light	Indications	Status	Functions
	Charging indication	Long-term On	The solar panel voltage is higher than light control voltage
		Long-term Off	The solar panel voltage is lower than light control voltage
		Slow twinkling	charging
		Fast twinkling	System over voltage
	Battery indication	Long-term On	battery works normally
		Long-term Off	battery unconnected
		Fast twinkling	battery is excessively discharged
		Long-term On	Load is on
	Load indication	Slow twinkling	The load is open circuit.
		Fast twinkling	The load is short circuit.
		Off	The load is off.



PROJECT SUCCESS CASE



Nelson Company



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