

20W SEMI-INTEGRATED SOLAR STREET LIGHT SPECIFICATION



30W SEMI-INTEGRATED OUTDOOR SOLAR STREET LIGHT WITH LITHIUM PO4 BATTERY

BENEFITS

APPLICATION

“P&C Electric” Semi-Integrated solar street light is a solar-powered LED lighting solution that can be used at any location where there is no any power supply available. Enabled with a Micro-Controller-based charge controller and Li-Fe-Po4 battery, it provides backup for 1 night even in the worst weather conditions.

It can be used in any outdoor type subject to the availability of Solar Power.

BENEFITS

Low Operation Cost: It is less expensive as compared to traditional Solar Street lights with Lead Acid batteries. Its running cost is zero because no extra power supply is required.

Compact Design: Our Semi-Integrated Street Light come with an inbuilt Li-FE-Po4 battery which makes it compact system, since no bulky and heavy battery box is required extra to store batteries.

Reduced Damage and Theft: Since Li-FE-Po4 battery is installed within the fixture itself, chances of damage, theft or tempering is greatly reduced. There is no wire available in the pole, which means that wire cannot be stolen or sold for scrap.

Improve Safety: Solar light is not connected to any external grid. So it is easier to install. In case of any power surge light remains on and safe.

Location for Installation: The solar-powered street light can be installed anywhere. Since no external grid is required it can be installed in parking areas, office roofs and remote locations.

Faster Installation: Since you don't need to trench power lines to the pole, run wires up the pole, connect wires to an electrical grid, or hard wire the street light, the installation is significantly faster. In fact, it is so easy, it can be installed on the pole before it's erected, and thereby reducing a step completely from the process.

QUALITY

We are **ISO 9001:2015 (IAF Accredited)** certified company. We are following high-quality measures to make our products robust and the best in the industry.

- **SOLAR PANEL:** We are providing IEC Certified, BIS Certified and MNRE Approved Polly-Crystalline solar panels. Our solar panels are very high in efficiency which supports proper charging of the Battery. We provide Flash reports of each solar panel, so our clients can submit to concerned agencies.
- **Li-Fe-Po4 Battery:** We use BIS-certified Li-Fe-Po4 And Lithium Ion Cells and A Grade BMS in our Batteries, which makes it equal to industry norms.

GENERAL SPECIFICATION	
Model & TYPE	PNC-SSL-20W/18ah or 20ah Lithium Ion & 18ah lipo4 Semi-Integrated Solar Street Light
Application	Outdoor
Working Temp	-10°C to 60°C
Reflector	Aluminium Sheet
Heatsink Paste	DuPont
Fixture Type	AL Die Casting
Outdoor Protection	IP 65

OPTICAL AND ILLUMINATION	
Led Max Output	20W
LED Type	2835/3535/5050
LED Make	OSRAM/SEOL
Max Lumens (Lm)	2400Lm -2750Lm
Efficiency (Lm/W)	>130
CCT(k)	5500 – 6500
Autonomous Time	More Than 20 Hours
LED Life	>50000h



CONTROLLER SPECIFICATIONS	
PWM/MPPT	9W CONTROLLER
Input voltage	11.1V/12.8V
Output voltage	12v dc
Diming	As for customized
Mode off operation	Saving mode on
switch	Optional smart switch
Cut off	Over and low voltage cut off
Short circuit	on
Charging	Green indication On
Battery low	Red Indication ON
Max. Current	5Amp
Solar wire	Yellow (+) and Blue (-)
Battery wire	Red (+) and Black (-)

BATTERY PARAMETERS	
Battery Type	Li-FE-Po4/Lithium Ion
Rating	12.8V, 18Ah Or 11.1V , 18/20Ah
BMS Type	4S, 10A Balancing
Battery LCV	10.5V/ 9.9V
Battery HCV	14.6V /13.6V
Battery Life	5 years and 2 years
Protection	Over Charge, Deep Discharge



PHOTOVOLTAIC PARAMETERS	
Module Type	Polycrystalline/mono crystal
Wattage	75Wp
Total Cell	36 Cells
Cell Efficiency (%)	14.62%
Maximum Power Voltage (Vmp)	17.85V
Maximum Power Current (Imp)	4.5A
Solar Panel Open Circuit Voltage (Voc)	22.29V
Solar Panel Short Circuit Current (Isc)	6.01A
Operating Life	25Years
Dimension



LUMINARY PARAMETERS	
Charge Controller Type	Micro-Controller Based
Max Charging Current	5A
Charging Time	6-10 Hours
First 4 Hours of Operation	100% Brightness
Rest Operation	50% Brightness
Dusk to Dawn	Provided
Short Circuit Protection	Provided
LOW Battery Indication	RED Constant
Battery Charging Indication	Green Constant



MOUNTING ACCESSORIES	
Pole Type	GI Pipe
Pole Height	5-meter and 6 meter
Pole Dia	76mm
Solar Panel Mounting Structure	Provided
LED Light Mounting Arm	Provided

SI-10322

