

# FLUENT POWER & CONTROL ELECTRIC PVT. LTD

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# 36W 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-36W/36ah Lithium Ion & 36ah 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	36W	
LED Type	2835/3535/5050	
LED Make	OSRAM/SEOL	
Max Lumens (Lm)	4680Lm -5040Lm	
Efficiency (Lm/W)	>130-140	
CCT(k)	6400k	
Autonomous Time	More Than 20 Hours	
LED Life	>50000h	





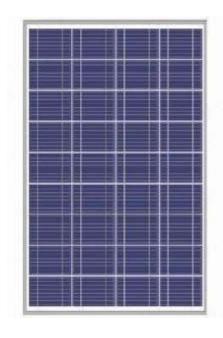
CONTROLLER SPECIFICATIONS		
PWM/MPPT	6w to 60W CONTROLLER	
Input voltage	11,1V DC AND 12.8V DC	
Output voltage	36V DC	
Diming	As for customized	
Mode off operation	Saving mode on	
switch	Optional smart switch	
Cut off	Over and low voltage cut off	
Short circuit	On	
Charging	Green indication On	
Battery low	Red Indication ON	
Max. Current	12Amp	
Solar wire	Yellow (+) and Blue (-)	
Battery wire	Red (+) and Black (-)	

BATTERY PARAMETERS	
Battery Type	Li-FE-Po4/Lithium Ion
Rating	12.8V, 24Ah Or 11.1V , 22/24Ah
BMS Type	4S, 15A 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 PARAMETRERS	
Module Type	Polycrystalline/mono crystal
Wattage	120Wp
Total Cell	36 Cells
Cell Efficiency (%)	14.62%
Maximum Power Voltage (Vmp)	18.5V
Maximum Power Current (Imp)	5.5Amp
Solar Panel Open Circuit Voltage (Voc)	22V
Solar Panel Short Circuit Current (Isc)	7.91A
Operating Life	25Years
Dimension	1360X665



LUMINARY PARAMETERS		
Charge Controller Type	Micro-Controller Based	
Max Charging Current	12AMP	
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	6-meter and 7 meter
Pole Dia	76mm
Solar Panel Mounting Structure	Provided
LED Light Mounting Arm	Provided

















