

SOLAR STREET LIGHT STRUCTURE

Pole Length	5m
Pole Material	Galvanised IRON
Diameter	75mm
Thickness	1.2mm
Weight of Pole	13-15Kg
H-Frame Material	MS
Battery Box	Plastic
Luminary Clamp	Material MS

2- LUMINARY TECHNICAL DETAILS

Power Consumption	12W (+/-10%)	Solar Charge Controller	12V 10A	Color	cool white
Max Lumen	920 lm	LED driver Efficiency	>90%	Color temp	2700-6500k
Weight	103Kg	Load cut-off voltage for battery		Working life	60000hrs
Beam Angle	120 degree	deep discharging protection	9V	Body Type	Aluminium
Led Lumen	160lm/W	Humidity Ranges	20 to 50C	Dimension	370*135*55
Pole entry dia	37 mm	Temperature ranges	20 to 50C	IP Rating	IP66
Input Voltage	12V	CRI	70-82		

3- SOLAR PANEL TECHNICAL DETAILS

ELECTRICAL DETAILS

Peak Power Watt (Pmax)	75w
System Voltage	12V
Maximum Power Voltage-Vmp (V)	17.8
Maximum Power Current-Impp (I)	4.21
Open Circuit Voltage-Voc (V)	21.6
Short Circuit current-Isc (A)	4.59
POWER OUTPUT TOLERANCE	Positive Tolerance Only

MAXIMUM RATINGS

Operational Temperature	40-85°C
Maximum System Voltage	1000v DC (IEC)/600V DC (UL)
Max Series Fuse Rating	5A, 10A, 15A
Maximum Power Current-Impp (I)	4.21
Open Current Voltage-Voc (V)	21.6
Short circuit current -Isc (A)	4.59
POWER OUTPUT TOLERANCE	Positive Tolerance Only

MECHANICAL DETAILS

SOLAR CELLS	Poly/Multi crystalline
DIMENSION (MM)	775*665
Weight	7.4Kg
Glass	High Transparency solar Glass
Frame	Anodized Aluminum Alloy
J-BOX	IP65

TEMPERATURE RATINGS

Nominal Operating Cell	
Temperature (NOCT)	45°C (*2°C)
Temperature Coefficient of Pmax	0.433%/°C
Temperature Coefficient of PVoc	0.3434%/°C
Temperature Coefficient of Isc	0.0534%/°C

4- SOLAR BATTERY TECHNICAL DETAILS

Battery Type	Tubular Lead Acid	Boost Charging	Starting Current 4.8A
Battery Ratings	12V. 40 Ah @C10	Finishing current	2.4A, 2.75VPC
Nominal Voltage of Battery	12V	Trickles charging Rates	45-180mA
Standard to which battery is made	IS 13369; 1992	Electrolyte sp gravity at the	

1.25 +/- 0.005

Polypropylene
Tubular positive
Flat pasted
Lead Antimony Alloy
PE
H2SO4

Dimensions	407mm* 176mm*250mm
Dry weight of Battery	13.5 Kg (+/-5%)
Net Weight of Battery	23.5.kg +/-5%
Ampere hour efficiency :-	90%
Watt hour efficiency:	> 70%
Loss of Cap. in 28 days due to Self-Discharge	<10%

Battery container
Type of positive plate
Type of Negative plate
Terminals
Material of separator
Electrolyte