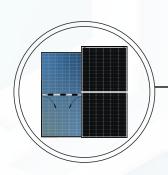


# PRODUCT CATALOGUE (2021)



## **Solar Panel**

10 W - 440/530 W



75 Wh - 5,000 Wh





## **Solar Charge Controller**

10 amp - 20 amp



4 - 10 sq. mm.



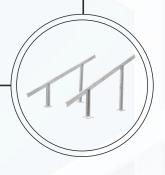


## **Solar Street Light**

12 - 30 Watt

**Solar Structure** 

1 - 50 Panel



# **ABOUT LOOM SOLAR**

- Started in 2018 at Faridabad, Haryana
- Winner Of Fastest Growing SMB Amazon Sambhav Energy Business of the year, 2021
- India's No.1 Manufacturer of Mono Perc Solar Panel and Lithium Batteries
- In House Research And Development



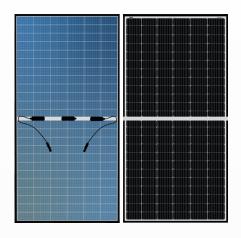




**Corporate Customers** 



Awards



Loom Solar is a manufacturer of Solar Panel from 10W - 440/530 Watt in different technology such as Mono Perc , Bi-Facial. Our Panel are suited for Home Rooftop and Agricultural applications.



## **MODULE**

Model Name	10 Watt	20 Watt	40 Watt	50 Watt	75 Watt	125 Watt	190 Watt	390 Watt	SHARK	SHARK Bifacial
Power (pm) in Watts (Nominal)	10	20	40	50	75	125	190	390	440	440
No. of Cells	40	38	36	36	36	36	36	72	144	144
Rated Module Voltage	12	12	12	12	12	12	12	24	24	24
Voltage at Maximum Power (Vmp) in Volts	19.25	19.25	19.25	20	20	20	19.85	40	42	42
Current at Maximum Power (Imp) in Amps	0.52	1.04	2.08	2.51	3.75	6.25	9.58	9.75	10.5	10.5
Open Circuit Voltage (Voc) in Volts	22.5	22.5	22.5	22.5	22.7	22.5	24.66	45	50	50
Short Circuit Current (Isc) in Amps	0.55	1.11	2.22	2.65	4.40	6.45	9.81	10	11	11
Maximum System Voltage (VDC)	600	600	600	600	600	600	600	1500	1500	1500
Module Efficiency η (%)	13%	14%	16.50%	18.19%	16.43%	16.93%	19.5%	19.8%	20%	22%
STC: Irradiance 1000W/M², Ambie	STC: Irradiance 1000W/M², Ambient Temperature 25°C, Air Mass 1.5, Measuring Tolerance ± 3%									

## **MECHANICAL DATA**

Junction Box		In65 rated		65 rated w pass diod		IP67 / IP68 rated with 3 Bypass diodes			es		
Application Class						Class A (S	Safety Class	II )			
Glass				Hig	h Transmi	ission Low	Iron Tempe	red Solar G	lass		
Cells			F	Poly Crysta	lline Solar	Cells [ 10,	20, 40 Wat	t] /Mono Pe	erc Solar Ce	ells	
Cell Encapsulate		Ethylene Vinyl Acetate (EVA) - FC/UFC									
Back sheet	Composite Film - White										
Frame				Silve	r Anodize	d Aluminiur	n Frame wi	th Twin Wal	l Profile		
Mechanical Load Tes	t		S	ustain Hea	vy Wind 8	Snow Loa	ds (2400 P	a & 5400 Pa	a or 550 Kg	/m2)	
Max Series Fuse Rati	ing	6A	6A	10A	10A	10A	15A	15A	15A	20A	20A
Module Weight (Kg)		1 kg	1.70 kg	3.66 kg	3.66 kg	4.90 kg	7.90 kg	11.46 kg	19.74 kg	25 kg	25 kg
	L	225	435	430	430	605	1020	1495	1985	2131	2131
Dimension in (mm)	W	350	350	670	670	670	670	670	1000	1047	1047
	Н	17	17	35	35	35	35	35	35	40	40

## **WARRANTY & CERTIFICATION**

Performance Warranty*	25 Years (90% module efficiency after 10 years, 80% module efficiency after 25 years)
Certificates	IS:14286, IS-61215, IS-61730

<sup>\*</sup>Refer solar module warranty card document

Technical Parameters are subject to change without any prior notice

# **LITHIUM BATTERY**



ATOM Batteries are Powered by Lithium cells. It is potable multipurpose long life and higher Back Up batteries. It is replacement of traditional lead acid batteries used in Home inverters, street lights and portable machines.





## LITHIUM BATTERY

	Nominal	Capacity @	Canacity	Overall Dimension			Free	BMS	
Model Name	Voltage (V)	Capacity @	Capacity (Wh)	Battery Weight (Kg)	Length ± 3 mm	width ± 3 mm	Height ± 3 mm	Replacement (Months)	(Amp.)
ATOM 612	12	6	75					36	
ATOM 1212	12	12	150					36	
ATOM 2012	12	20	250					36	
ATOM 3012	12	30	385					36	
ATOM 4012	12	40	500					36	
ATOM 8012	12	80	1,000					36	
ATOM 8024	12	80	2,000					36	

## **Applications**

- Home Lighting System
- Electric Vehicle
- Potable Machines
- . Home Inverters



Solar panel are the source of direct current (dc). It is strongly advisable to use dc wire for connecting solar panels with inverter or charge controller. It increases efficiency and works in outdoor condition as it is UV protected.

## **TECHNICAL DATA**

# Solar DC Cables from PV Module to Array Junction Box (as per TUV Specification- EN 50618 : 2014)

Single Core In Sq. mm.	E-BEAM XLPO Insulation thickness- Nominal in mm.	E-BEAM XLPO Sheath thickness- Nominal in mm.	Overall Diameter in mm.	Tolerance on diameter	Tinned Copper maximum Resistance @20°C (ohms-Ω/Km)	Current Carrying capacity (Single Cable In Air) (In Amps - A)
4	0.7	0.8	4.8	+/- 0.4	13.70	30
6	0.7	0.8	5.2	+/- 0.4	8.210	41
10	0.7	0.8	6.4	+/- 0.4	3.390	70

# **CHARGE CONTROLLER**



Loom Solar Charge Controller is an advanced micro controller unit based on PWM technology. The charging process has been optimized for longer battery life and improved system efficiency.





#### **SOLAR CHARGE CONTROLLER**

Model Name	FUSION 1024	FUSION 2024	FUSION 1012
Charge Controller Rating (Amp.)	10 amp.	20 amp.	10 amp.
Technology			
System Voltage	12 /	12.8 V	
Setting	Auto S	Lithium Battery	
Maximum Solar Panel (Wp)	12V @ 190W 24V@ 440W	12.8V @ 440W	
Maximum Solar Panel Voltage	60V	60V	60V

#### **BATTERY SETTINGS**

Voltage	12V	24V	12.8V	
Bulk Voltage (V)	14.2V	28.4	14.6	
Default Voltage (Bulk)	14.20	20.4		
Float Voltage (V)	13.5	07)/	40.0)/	
Default Voltage (Float)	13.3	27V	12.8V	
Low Battery (V)	10.5V ± 0.2V	21.0V ± 0.2V	9.9V ± 0.2V	

#### **PROTECTIONS & USER INTERFACE**

	Solar Battery Reserved Protection				
	Reserve Current From Battery at night (blocking diode)				
	No loads auto cut off (Battery saver mode)				
PROTECTIONS	Miswiring / Reverse Polarity Protection (Fuse)				
FROTECTIONS	Transient / Surge				
	Over Charging				
	Deep Discharge				
	Overload-Auto Shutdown And Restart				
	Yellow LED Steady - Solar Available and charging the LED				
LED INDICATION	Yellow LED Blinking - Battery is fully charged				
LED INDICATION	Red LED steady - Battery Low				
	Red LED Blinking - Fault				

#### **GENERAL**

Operating Temperature	0°C to 50°C						
Dimensions (LxWxH) MM	112 x 125 x 25						
Net Weight (Kg)	0.32	0.45	1.48				

Technical Parameters are subject to change without any prior notice

# **SOLAR STREET LIGHT**



Solar Street Light is completely an off - grid solution. It is made up of Solar Panels, Lithium batteries and lights. It is a semi - integrated products having lights and battery as me unit and solar panel as another unit.





## **TECHNICAL SPECIFICATION**

Model	12 Watt	20 Watt	30 Watt	
Output Power	12 Watt	20 Watt	30 Watt	
<b>Battery Capacity</b>	12 AH	20 AH	30 AH	
Battery Technology	Lithium Phosphate	Lithium Phosphate	Lithium Phosphate	
Controller Technology	MPPT	MPPT	MPPT	
Panel Wattage	50 Watt	75 Watt	125 Watt	
Panel Technology	Mono Perc	Mono Perc	Mono Perc	
Dimming Features	Yes	Yes	Yes	
Dust To Down Feature	Yes	Yes	Yes	
Pole Length	6 Meter	6 Meter	6 Meter	
Pole Accessories	Base Plate J-ROD	Base Plate J-ROD	Base Plate J-ROD	
LED Make	Samsung	Samsung	Samsung	
Protection	Over Charge Deep Discharge	Over Charge Deep Discharge	Over Charge Deep Discharge	
Price	₹ 15,000	₹ 17,500	₹ 20,000	



Solar Panels are install for 25 years life. So, Solar Panel must with stand this long life. Loom Solar Manufacture Solar Panel Stand from Galvanized iron which will be Rust Free.



**Water Pump** 



Rooftop



**Wall Mounted** 



**Tin Shed** 



**High Rise** 



# **Coorporate Office:**

Plot No. 14/6, Mathura Road, Sector - 27B, Faridabad, Haryana - 121003 (INDIA)

## Factory/Warehouse:

Plot No. 21/1, Mathura Road, Faridabad, Haryana - 121006 (INDIA)

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