

AMAZE SOLAR

POWER OF PERFORMANCE



SOLAR
PRODUCT CATALOGUE 2023

AMAZE SOLAR PRODUCTS



PV PANELS



**SOLAR
INVERTER**

**SOLAR CHARGE
CONTROLLER**



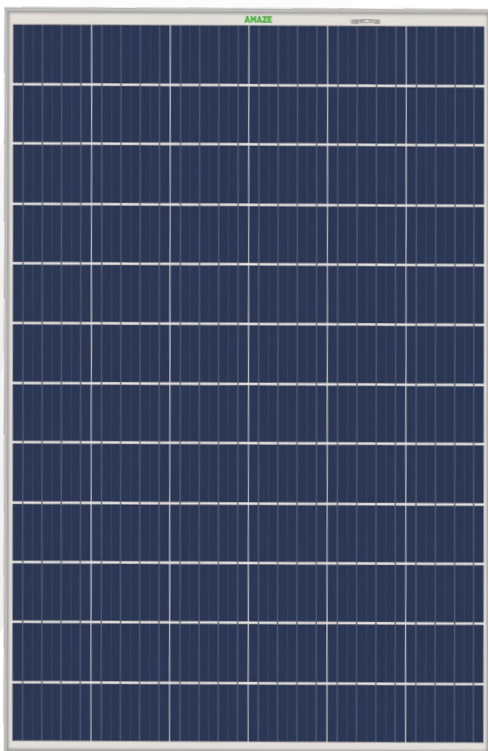
**SOLAR
BATTERY**

AMAZE

PV PANELS

Designed For High Performance

Amaze offers a range of both Mono PERC and Polycrystalline PV modules. Ranging from 40W to 370W, our panels comply with IEC standards and are suitable for a wide range of applications.



Excellent Low-light Performance

Built with high quality glass and solar cell surface coating, especially for performance in low-light conditions.



Resilience to Extreme Weather

The robust waterproof, corrosion and torsion resistant design offers protection against wind and snow.



PID Resistance Technology

Designed to eliminate power loss owing to stray currents.



Advance EVA Encapsulation

Designed with multi layer EVA (ethyl vinyl acetate) encapsulation for better module protection.



Best in Class Efficiency

Innovative cell technology ensures optimum solar power generation providing high value for money.

IDEAL FOR

- Large scale utility systems
- Residential, commercial and industrial roof top installations
- Agricultural pumping applications

*Refer models for respective warranty



**25 Years
Performance
Warranty**



**5 & 12 Years*
Product
Warranty**



**Robust
Mechanical
Design**

Electrical Parameters @ STC[#]

Model	AMS 12105	AMS 12165	AMS 24330
Cell Type	Poly	Poly	Poly
No. of Cells	36	36	72
Peak Power P _{Max} (Wp)	105	165	330
Rated Module Voltage (V)	12	12	24
Maximum Power Voltage V _{mp} (V)	18.05	18.65	38.03
Maximum Power Current I _{mp} (A)	5.82	8.85	8.68
Open Circuit Voltage V _{oc} (V)	22	22.84	45.53
Short Circuit Current I _{sc} (A)	6.28	9.55	9.22
Module Efficiency (%)	15.14%	16.64%	16.85%
Maximum System Voltage (V)	600V	600V	1000V
Maximum Series Fuse Rating	12A	20A	20A

[#]STC (1000W/m²), AM1.5, cell temperature 25°C. Power Tolerance : 0/+5%. Power measurement accuracy:±3%

Mechanical Data

Module Dimensions (mm)	1035x670	1480x670	1976x991
LxWxT	x34	x34	x35
Module Weight (kgs)	8.20	11.50	22.50
IP Rating	IP 65	IP 65	IP 67
Cable & Connectors	1000mm length cables		1000mm length cables, MC4 Compatible/MC4 Connectors
Frame	Silver Anodized aluminium alloy		
Glass	3.2mm thick high transmission low iron tempered glass, AR coated		
Cell Encapsulant	EVA (Ethylene Vinyl Acetate)		
Back Sheet	Composit Film		
Maximum Surface Load Capacity	5400 Pa (Pascals)		
Application Class	Class A (Safety Class II)		

Permissible Operating Conditions

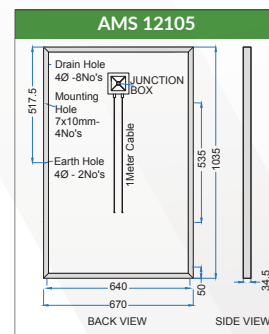
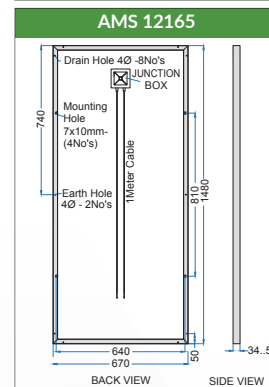
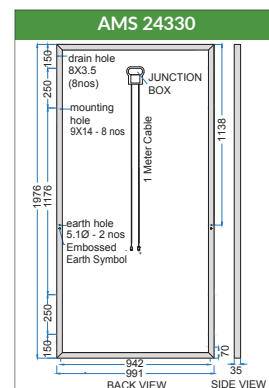
Operating Temperature	- 40°C to + 85°C
Temp coefficient of Open Circuit Voltage	-0.33 %/°C
Temp coefficient of Short Circuit Current	0.03 %/°C
Temp coefficient of Power	-0.41 %/°C

Warranty and Certifications

Product Warranty**	5 Years	12 Years
Performance Warranty**	Linear Performance Warranty for 25 Years with 3% for 1st year degradation and 0.70% from year 2 to 25	
Approvals and Certificates	IEC 61215 Ed2, IEC 61701, IEC 61730-1, IEC 61730-2	

** Refer to Amaze Warranty document for Terms and conditions.
Technical specifications are subject to change without prior notice.

Solar Module Dimension



AMAZE

SOLAR INVERTER

Unmatched Performance

AMS range is a solar inverter range that intelligently uses grid and solar power. With ability to operate in a wide voltage range, AMS is the ideal starter solar solution for homes.



ISOT Technology

Intelligent Solar Optimization Technique (ISOT) maximizes solar energy usage in both backup and charging mode of operation.



Fast Charging

i-charge technology enables charging of batteries in a short time. This is a user defined setting.



ECO and UPS Mode

Choice between Eco mode that conserves battery (Ideal for low voltage areas) and UPS mode (Ideal for computer loads)



Safety and Protection

In-built protection against deep discharge, overcharge, excessive current and short-circuit.



Pure Sine Wave Output

Ensures noiseless operation and safety of connected appliances.



2 Years
Warranty



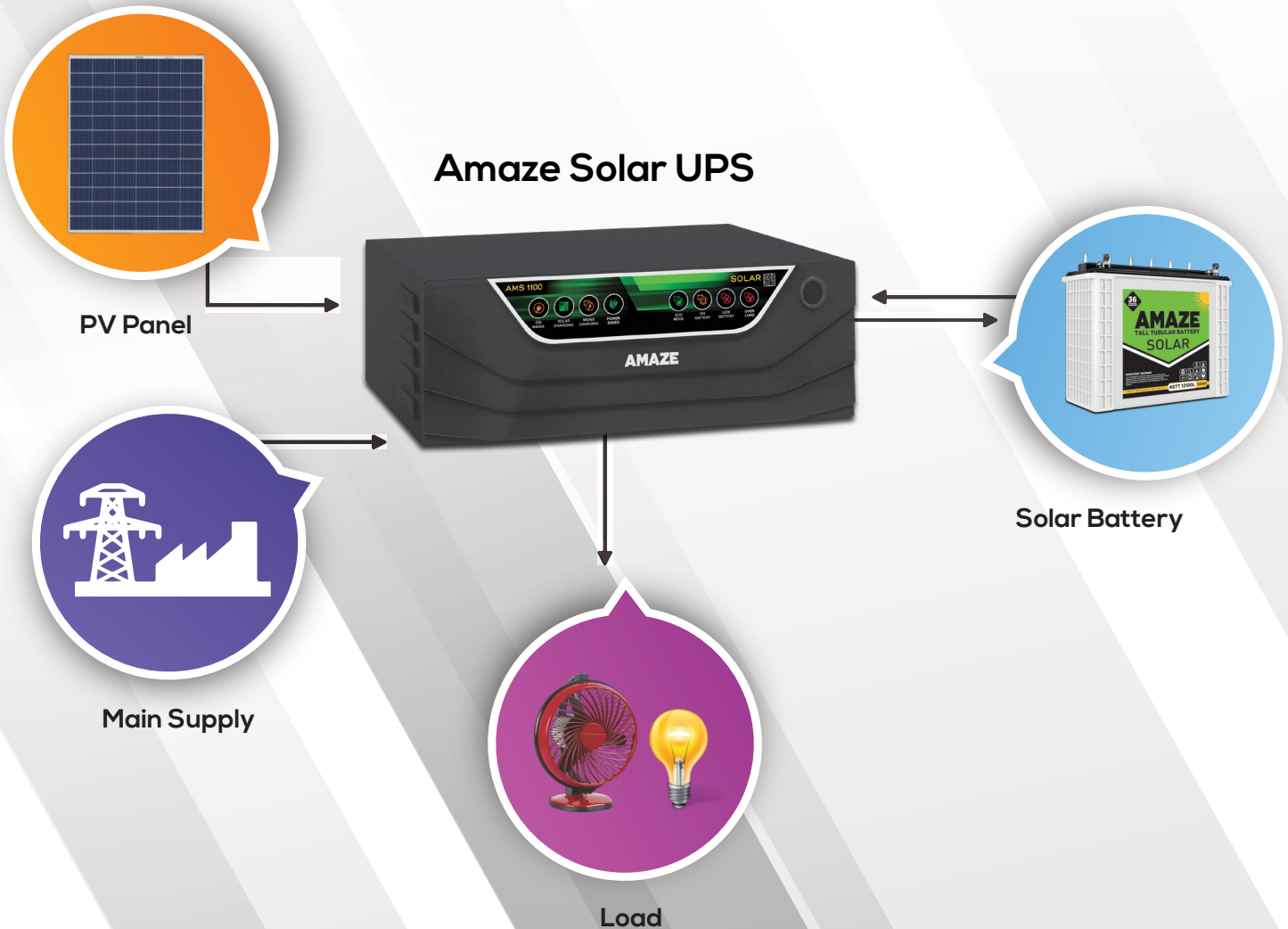
Maximized Solar
Usage



User Defined
Settings

Solar Estimation Chart

Solution			Panel Connection Combination (Series-Parallel)	Approx. Roof Top Area Required (Sq. ft.)
Solar UPS	Solar Battery	PV Panel Watt		
AMS 750	120 Ah x 1	165 Wp x 2 No.s	2 (P)	40
AMS 1100	150 Ah x 1	165 Wp x 4 No.s	4 (P)	80
AMS 1400	150 Ah x 1	165 Wp x 4 No.s	4 (P)	80
AMS 1625	150 Ah x 2	330 Wp x 3 No.s	3 (P)	100



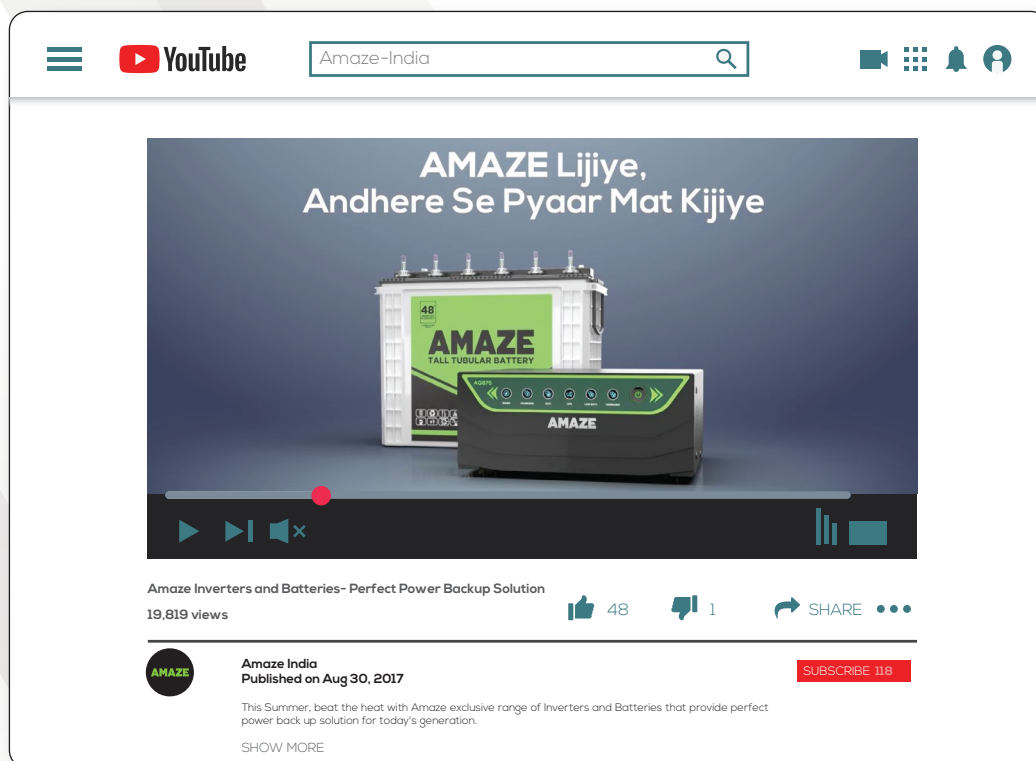
Technical Specifications

Model Name	AMS 750	AMS 1100	AMS 1400	AMS 1625
Nominal Battery Voltage (Vdc)	12V	12V	12V	24V
Output Waveform	Sine Wave			
SOLAR PHOTOVOLTAIC INPUT				
Charge Controller Type	PWM			
Charge Controller Rating	20Amp/12V	40Amp/12V	40Amp/12V	40Amp/24V
Maximum PV Power	12V upto 400 Wp	12V upto 800 Wp	12V upto 1000 Wp	24V upto 1000 Wp
Input Voltage range (Voc)	19-25	19-25	19-25	38-50
Input Voltage range (Vmp)	17-19	17-19	17-19	34-39
GRID INPUT				
Operating Voltage Range	100V-290V			
GRID OUTPUT				
No Load Output	230±10V	220±5V		
Output frequency battery mode	50Hz±0.5Hz			
No load current (UPS switch off)	< 65mA			
UPS efficiency	≥ 80%*			≥ 85%*
BATTERY				
Battery charging through Mains	Mains LED steady + Mains charge LED steady			
Battery charging through Mains + Solar	Mains LED steady+Mains charge LED steady+solar CHG LED steady/Blinking			
Battery charging through Solar	Solar CHG LED Blinking + Mains charge LED OFF			
Low battery pre-alarm indication	Battery low LED blinking			
Solar optimization after battery fully charged	ON mains+power save LED on+ON battery LED on+solar charge LED blinking			
PROTECTIONS				
Over load	110% - 150% for 30 Sec.	110% for 4.5 Min.	110% for 30 Sec.	110% for 4.5 Min.
	150%-180% for 10 Sec.	120% for 1 Min	120% for 5 Sec.	120% for 1 Min
	200%- Short circuit	150% for 10 Sec.	200% for 1 Sec.	150% for 10 Sec.
	NA	200% for 1 Sec.		200% for 1 Sec.
Overload shutdown indication in UPS mode	Overload LED steady			
Overload pre-alarm indication in UPS mode	Overload LED slow blinking			
Short circuit indication in UPS mode	Overload LED fast blinking			
Protections	Short circuit, overload, high temperature, battery low cut off			
Indications	Switch on, Battery Charging;mains, solar, mains+solar; Overload, Short circuit, i-charge			
Additional features	NA			
DISPLAY INDICATIONS				
Switch on indication	Switch LED ON			
UPS on indication	Battery LED ON			
Internal fault	NA	Service assistance LED on		
Mains on indication	Mains LED steady			
Mains charging current selection charge	6A (i-Charge Off)/ 10A (i-Charge ON)	10A (i-Chg OFF)/15A (i-Chg ON)		
DC overload indication	NA	(Mains LED+overload) blinking		NA
GENERAL				
Net weight (Kg)	9.3Kg	11.5Kg	14.6Kg	15.66Kg
Gross weight (Kg)	10.7Kg	12.7Kg	16.03Kg	16.90Kg
Dimensions LxWxH (mm)	375X315X135	375X315X135	375X315X150	375X315X150

*Peak Efficiency

Technical specifications are subject to change without prior notice.

For more information



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SOLAR

AMAZE

CHARGE CONTROLLER

Easy upgrade to Solar

Amaze Charge controllers provide an easy upgrade to solar for existing users of DC loads.



Protection Against Over-Charge and Reverse Current

Charges batteries from solar panels without permitting overcharge and also prevent reverse current flow at night.



USB Port

Charge your DC devices like Mobile, Tablets etc. directly without using adapter.



Warranty

1 Year warranty

Solar Estimation Chart

Solution			Panel Connection Combination (Series-Parallel)	Approx. Roof Top Area Required (Sq. ft.)
Solar Charge Controller	DC Voltage	PV Panel Watt		
AMS SCC 1206	@12V	105Wp x 1 No.s	1 (S)	10
AMS SCC 1210	@12V	165Wp x 1 No.s	1 (S)	20
AMS SCC 1210	@24V	330Wp x 1 No.s	1 (S)	40
AMS SCC 1220	@12V	165Wp x 2 No.s	2 (P)	40
AMS SCC 1220	@24V	330Wp x 2 No.s	2 (P)	80

Technical Specifications

Model Name	AMS SCC 1206	AMS SCC 1210	AMS SCC 1220
Charge Controller Type	PWM		
Charge Controller Rating	6A @ 12V	10A @ 12V / 24V	20A @ 12V / 24V
Maximum PV Power	125Wp @ 12V	200Wp @ 12V/400Wp @ 24V	400Wp @ 12V/800Wp @ 24V
Input Voltage range (Voc)	17-25	17-25 @ 12V, 36-50 @ 24V	
Input Voltage range (Vmp)	15-21	15-21 @ 12V, 31-39 @ 24V	

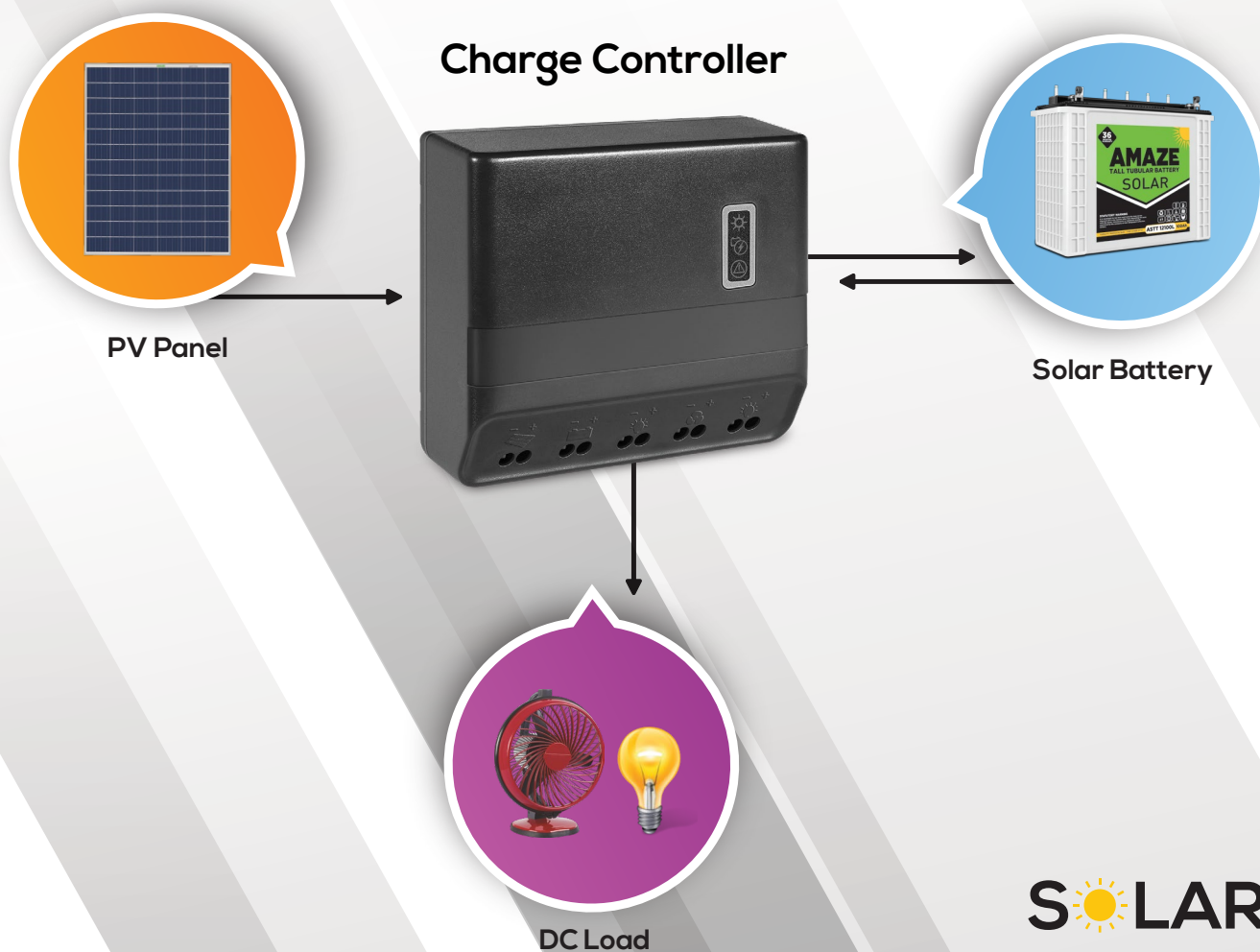
LOW VOLTAGE DISCONNECT

A) By state of charge	N.A	Available
B) Controlled by voltage	Available	
Self consumption	Less than 10mA	

EFFICIENCY:

A) Charging	98.50%		96%
B) Load	98%		96%
Operating temperature range	0°C to 50°C		
Power connections	30 Ampere Terminal		
Battery type selection	Lead Acid & SMF		
Enclosure	ABS Plastic, IP21		
Dimensions (mm)	40 x 60 x 135 (L x W x H)		
Wire size	2.5 sq. mm	4 sq. mm	6 sq. mm
Net weight	275 gms	300 gms	350 gms

Technical specifications are subject to change without prior notice.

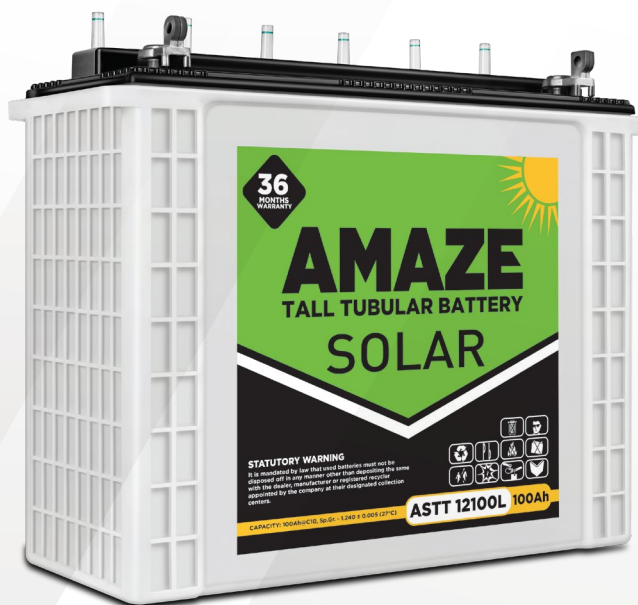


AMAZE

SOLAR BATTERY

Power of Performance

Amaze Solar Batteries are C10 rated deep cycle batteries specially designed for longer back up.



Very Low Maintenance

Topping up frequency :
Once in 8 to 10 months



Long Design Life

Long cycles
(1500@80% DOD, 5000 @20% DOD)



High Temperature Performance

Can handle extreme weather
conditions



Upto 5 Years
Warranty



Tubular Technology
for longer life



Rugged
Performance

Technical Specifications

Model Name	Nominal Voltage	C10 Capacity	Length ± 3	Width ± 3	Height upto float top ±3	Dry Weight ±3%	Filled Weight ±3%	Electrolyte Volume ±5%
	V	Ah	mm	mm	mm	kg	kg	litre
ASTT12150L	12	150	502	191	440	34.5	60	20.6
ASTT12150H	12	150	502	191	440	34.5	60	20.6

Technical specifications are subject to change without prior notice.

*STC - Standard Test Conditions

UNMATCHED CUSTOMER SERVICE

Prompt and continuous support to keep your solar power generation system running. Our Service Team in 300 cities constitutes of trained professionals who are available 24*7 making us the most powerful Brand in India.



AMAZE SOLAR

ONGLAST POWER PRODUCTS LIMITED

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