



**HAMESHA  
READY TO  
PERFORM**

**FAST CHARGING**

**HEAVY  
DUTY**



**LONG LASTING**

Product Catalogue  
2025



Amaze Solar is the leading provider of cutting-edge solar energy solutions. Specializing in residential solar panel installations, they offer state-of-the-art photovoltaic systems that seamlessly integrate with your home.

With a focus on efficiency and sustainability, Amaze Solar ensures customized setups to maximize energy production and minimize costs.

Their team of experts guides clients through the entire process, from initial consultation to installation and beyond. Choose Amaze Solar for a reliable and eco-friendly energy solution that transforms sunlight into savings.







Topcon Bifacial Solar Panels



## Solar Panels



TOPCON solar cells are the innovative technology of the photovoltaic industry with high efficiency, reduced electron recombination through a tunnel oxide layer, and improved durability with less degradation over time. They often come with bifacial capabilities, capturing sunlight from both sides, and perform well in low-light conditions, making them ideal for utility-scale and rooftop installations.



**Premium Grade  
A Cells**



**Quality checks through  
advanced AI Tech**



**Anti-reflection  
Coating**



**Fully Tempered  
Automotive Glass**



**30 Years  
Performance  
Warranty**



**12 Years  
Product  
Warranty**

**ALMM  
Approved**

**Enlisted under  
ALMM Order**

Bi-facial Transparent Backsheet

Electrical Data (STC )	AMS 24575T144	AMS 24580T144	AMS 24585T144	AMS 24590T144
Peak Power Pmax (Wp)	575	580	585	590
Maximum Power Voltage Vmp (V)	42.44	42.59	42.74	42.88
Maximum Power Current Imp (A)	13.55	13.62	13.69	13.76
Open Circuit Voltage Voc (V)	51.27	51.47	51.67	51.86
Short Circuit Current Isc (A)	14.31	14.37	14.43	14.49
Module Efficiency (%)	22.26	22.45	22.65	22.84

STC: Irradiance 1000W/m 2 , Cell Temperature: 25 °C, Spectrum AM1.5 (Measurement Uncertainty ± 3%), Isc & Voc ± 5%

NOCT	AMS 24575T144	AMS 24580T144	AMS 24585T144	AMS 24590T144
Peak Power Pmax (Wp)	431	435	439	443
Maximum Power Voltage Vmp (V)	39.44	39.58	39.72	39.85
Maximum Power Current Imp (A)	10.94	11	11.05	11.11
Open Circuit Voltage Voc (V)	48.6	48.79	48.98	49.16
Short Circuit Current Isc (A)	11.55	11.6	11.65	11.7

NOCT: Irradiance 800W/m 2 ,Ambient Temperature: 20 °C, Wind Speed 1m/s

BNPI	AMS 24575T144	AMS 24580T144	AMS 24585T144	AMS 24590T144
Peak Power Pmax (Wp)	637	643	648	654
Maximum Power Voltage Vmp (V)	42.44	42.59	42.74	42.88
Maximum Power Current Imp (A)	15.01	15.09	15.17	15.25
Open Circuit Voltage Voc (V)	51.27	51.47	51.67	51.86
Short Circuit Current Isc (A)	15.86	15.92	15.99	16.05

BNPI:1000W/m 2 +Φ.135, BIFACILITY COEFF. (Φ) AT BNPI PMAx, ISc IS 80±10% & FOR Voc IS 99±10% , AM 1.5, 25°C

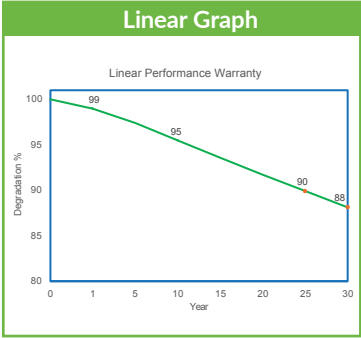
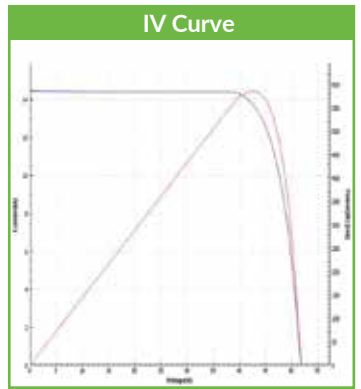
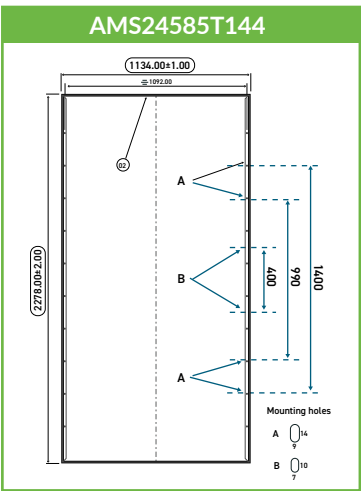
Electrical Characteristics with different rear side power gain (Reference 585 Wp Front)				
Bi-Facility Gain	10%	15%	20%	25%
Peak power Pmax (Wp)	643.00	672	702	731
Maximum Power Voltage Vmp (V)	44.60	44.60	44.60	44.60
Maximum Power Current Imp (A)	14.42	15.07	15.74	16.39
Open Circuit Voltage Voc (V)	53.93	53.90	53.95	53.92
Short Circuit Current Isc (A)	15.11	15.8	16.49	17.18
Module Efficiency (%)	24.78%	25.94%	27.10%	28.26%

Mechanical Data	AMS 24575T144	AMS 24580T144	AMS 24585T144	AMS 24590T144
Cell Type	TOPCON (N-Type)			
No. of Cells	72 (144 half- cells) Bifacial solar cells			
Rated Module Voltage (V)	24			
Maximum Series Fuse Rating	25A			
Module Dimensions (mm)	2278x1134x35			
Module Weight (KG)	28.8 Kg			
IP Rating	IP 68 (With Potting)			
Cable	300mm length cables (+ve and -ve Terminal), MC4 Compatible/ MC4 Connectors			
Frame	Silver Andonized aluminium alloy			
Glass	3.2mm thick high transmission low iron tempered glass, AR coated			
Cell Encapsulant	High quality Encapsulant			
Backsheet	Transparent Backsheet			
Maximum surface load capacity	5400 Pa (Snow Load), 2400 Pa (Wind Load)			
Application Class	Class A (Safety Class II)			

Temperature Co-efficients (Tc) and permissible operating conditions	AMS 24575T144	AMS 24580T144	AMS 24585T144	AMS 24590T144
Operating Temperature	-40°C to +85°C			
Temp coefficient of Open Circuit Voltage	-0.26%/°C			
Temp coefficient of Short Circuit Current	+0.046%/°C			
Temperature coefficient of Power	-0.31%/°C			
NOCT	45°C ± 2°C			

Warranty and Certifications	AMS 24575T144	AMS 24580T144	AMS 24585T144	AMS 24590T144
Product Warranty	12Years			
Performance Warranty	Linear Performance warranty for 30 Years with 1% for 1st year degradation and 0.45% from year 2 to 30			
Approvals and Certificates*	BIS certified as per IS/IEC standards			

Solar Module Dimension



\* Approvals & Certifications

IEC 61853-1 | IEC 61853-1  
IEC EC 62759-1 | IEC 61853-2 |  
IEC 61853-2 | IEC 62716 |  
IEC 62759-1 | IEC 61701 |  
IEC TS 62804 -1 | IEC 60068-2-68 |  
IEC 60068-2-68 | IEC TS 62804-1 |  
IEC 61701 | IEC 62716

Packaging Information

Container	32 Feet
Modules per pallet	31 Nos.
Pallets per container	16 Nos.
Modules per container	496 Nos.

Bi-facial Glass-to-Glass

Electrical Data (STC )	AMS 24575TG144	AMS 24580TG144	AMS 24585TG144	AMS 24590TG144
Peak Power Pmax (Wp)	575	580	585	590
Maximum Power Voltage Vmp (V)	42.44	42.59	42.74	42.88
Maximum Power Current Imp (A)	13.55	13.62	13.69	13.76
Open Circuit Voltage Voc (V)	51.27	51.47	51.67	51.86
Short Circuit Current Isc (A)	14.31	14.37	14.43	14.49
Module Efficiency (%)	22.26	22.45	22.65	22.84

STC: Irradiance 1000W/m 2 , Cell Temperature: 25 °C, Spectrum AM1.5 (Measurement Uncertainty ± 3%), Isc & Voc ± 5%

NOCT	AMS 24575TG144	AMS 24580TG144	AMS 24585TG144	AMS 24590TG144
Peak Power Pmax (Wp)	431	435	439	443
Maximum Power Voltage Vmp (V)	39.44	39.58	39.72	39.85
Maximum Power Current Imp (A)	10.94	11	11.05	11.11
Open Circuit Voltage Voc (V)	48.6	48.79	48.98	49.16
Short Circuit Current Isc (A)	11.55	11.6	11.65	11.7

NOCT: Irradiance 800W/m 2 ,Ambient Temperature: 20 °C, Wind Speed 1m/s

BNPI	AMS 24575TG144	AMS 24580TG144	AMS 24585TG144	AMS 24590TG144
Peak Power Pmax (Wp)	637	643	648	654
Maximum Power Voltage Vmp (V)	42.44	42.59	42.74	42.88
Maximum Power Current Imp (A)	15.01	15.09	15.17	15.25
Open Circuit Voltage Voc (V)	51.27	51.47	51.67	51.86
Short Circuit Current Isc (A)	15.86	15.92	15.99	16.05

BNPI:1000W/m 2 +Φ.135, BIFACILITY COEFF. (Φ) AT BNPI PMAX, ISC IS 80±10% & FOR VOC IS 99±10% , AM 1.5, 25°C

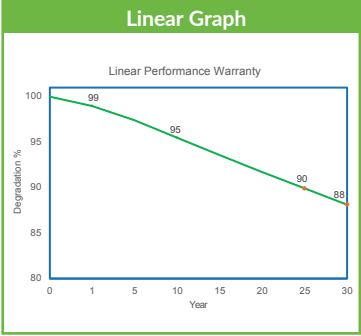
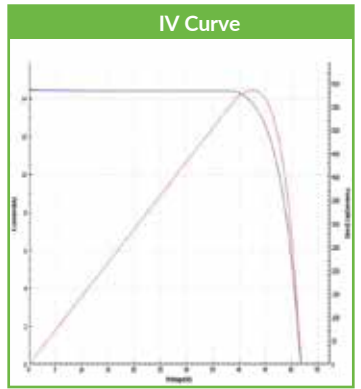
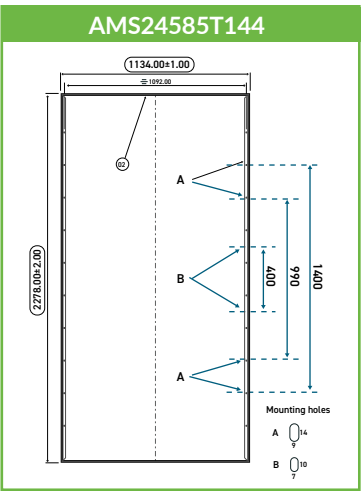
Electrical Characteristics with different rear side power gain (Reference 585 Wp Front)				
Bi-Faciality Gain	10%	15%	20%	25%
Peak power Pmax (Wp)	644.00	673	702	731
Maximum Power Voltage Vmp (V)	43.47	43.55	43.68	43.77
Maximum Power Current Imp (A)	14.81	15.44	16.09	16.73
Open Circuit Voltage Voc (V)	51.98	52.08	52.19	52.29
Short Circuit Current Isc (A)	15.86	16.58	17.31	18.03
Module Efficiency (%)	24.91%	26.04%	27.18%	28.31%

Mechanical Data	AMS 24575TG144	AMS 24580TG144	AMS 24585TG144	AMS 24590TG144
Cell Type	TOPCON (N-Type)			
No. of Cells	72 (144 half- cells) Bifacial solar cells			
Rated Module Voltage (V)	24			
Maximum Series Fuse Rating	30A			
Module Dimensions (mm)	2278x1134x35			
Module Weight (KG)	32 Kg			
IP Rating	IP 68 (With Potting)			
Cable	300mm length cables (+ve and -ve Terminal), MC4 Compatible/ MC4 Connectors			
Frame	Silver Andonized aluminium alloy			
Glass	Front 2.0mm thick ARC; Back 2.0mm Non ARC			
Cell Encapsulant	High quality Encapsulant			
Backsheet	Glass			
Maximum surface load capacity	5400 Pa (Snow Load), 2400 Pa (Wind Load)			
Application Class	Class A (Safety Class II)			

Temperature Co-efficients (Tc) and permissible operating conditions	AMS 24575TG144	AMS 24580TG144	AMS 24585TG144	AMS 24590TG144
Operating Temperature	-40°C to +85°C			
Temp coefficient of Open Circuit Voltage	-0.26%/°C			
Temp coefficient of Short Circuit Current	+0.046%/°C			
Temperature coefficient of Power	-0.31%/°C			
NOCT	45°C ± 2°C			

Warranty and Certifications	AMS 24575TG144	AMS 24580TG144	AMS 24585TG144	AMS 24590TG144
Product Warranty	12Years			
Performance Warranty	Linear Performance warranty for 30 Years with 1% for 1st year degradation and 0.40% from year 2 to 30			
Approvals and Certificates*	BIS certified as per IS/IEC standards			

Solar Module Dimension



*Approvals & Certifications
IEC 61853-1   IEC 61853-1
IEC EC 62759-1   IEC 61853-2
IEC 61853-2   IEC 62716
IEC 62759-1   IEC 61701
IEC TS 62804 -1   IEC 60068-2-68
IEC 60068-2-68   IEC TS 62804-1
IEC 61701   IEC 62716

Packaging Information	
Container	32 Feet
Modules per pallet	31 Nos.
Pallets per container	16 Nos.
Modules per container	496 Nos.



# PV Panels

Mono PERC Half Cut Bifacial Panels



## Solar Panels



Mono PERC half-cut solar panels utilize advanced cell-splitting technology to enhance efficiency and durability. By reducing resistive losses and optimizing energy output, they achieve higher performance while lower current minimizes power losses and heat buildup, extending lifespan. Improved shading tolerance ensures better operation in partial shade, while PERC technology enhances energy capture in low-light conditions. Additionally, the advanced design reduces hotspots, ensuring long-term reliability and stability.



**Excellent Low-light Performance**



**Functions like 2 parallel modules**



**PID Resistance Technology**



**Space Efficient**



**25 Years Performance Warranty**



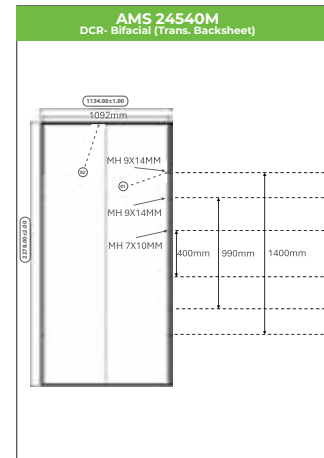
**12 Years Product Warranty**

**ALMM Approved**

**Enlisted under ALMM Order**

## Solar Module Dimension

Electrical Data	AMS 24540M DCR- Mono-Facial	AMS 24540M DCR- Bifacial (Trans. Backsheet)	AMS 24545M DCR- Bifacial (Trans. Backsheet)	AMS 24550M (Bifacial)
Peak power, Pmax(Wp)	540	540	545	550
Maximum Power Voltage Vmp (V)	41.92	41.92	41.96	42.00
Maximum Power Current Imp (A)	12.89	12.89	12.99	13.1
Open Circuit Voltage Voc (V)	49.40	49.40	49.44	49.48
Short circuit current, Isc (A)	13.72	13.72	13.83	13.95
Module efficiency (%)	20.89%	20.89%	21.09%	21.62%
Maximum System Voltage (V)	1500V	1500V	1500V	1500V



Electrical Characteristics with different rear side power gain (Reference 545 Wp Front)	AMS 24545M DCR- Bifacial (Trans. Backsheet)				AMS 24550M (Bifacial)			
Bi-Faciality Gain	10%	15%	20%	25%	10%	15%	20%	25%
Peak power Pmax (Wp)	599	626	654	681	605	632	660	687
Maximum Power Voltage Vmp (V)	41.96	41.96	41.96	41.96	42	42	42	42
Maximum Power Current Imp (A)	14.28	14.92	15.59	16.23	14.41	15.05	15.71	16.36
Open Circuit Voltage Voc (V)	49.42	49.37	49.44	49.41	49.51	49.49	49.53	49.48
Short Circuit Current Isc (A)	15.21	15.91	16.6	17.29	15.35	16.04	16.74	17.44
Module Efficiency (%)	23.03%	24.19%	25.16%	26.32%	23.42%	24.39%	25.55%	26.52%

Mechanical Data	AMS 24540M DCR- Mono-Facial	AMS 24540M DCR- Bifacial (Trans. Backsheet)	AMS 24545M DCR- Bifacial (Trans. Backsheet)	AMS 24550M (Bifacial)
Cell Type	Mono PERC Half Cut			
No. of Cells	144			
Rated Module Voltage (V)	24			
Maximum Series Fuse Rating	25 A			
Module Dimensions (mm)	2278 x 1134 x 35			
Module Weight (KG)	28.3			
IP Rating	IP 67			
Cable	300 mm length cables			
Frame	Silver andonized aluminium alloy			
Glass	3.2 mm thick high transmission low iron tempered glass, AR coated			
Cell Encapsulant	EVA ( Ethylene Vinyl Acetate )			
Backsheet	White		Transparent	
Maximum surface load capacity	5400 Pa			
Application Class	Class A ( Safety Class II )			

Temperature Co-efficients (Tc) and permissible operating conditions	AMS 24540M DCR- Mono-Facial	AMS 24540M DCR- Bifacial (Trans. Backsheet)	AMS 24545M DCR- Bifacial (Trans. Backsheet)	AMS 24550M (Bifacial)
Operating Temperature	-40°C to +85°C			
Temp coefficient of Open Circuit Voltage	-0.3%/°C			
Temp coefficient of Short Circuit Current	+0.06%/°C			
Temperature coefficient of Power	-0.35%/°C			

Warranty and Certifications	AMS 24540M DCR- Mono-Facial	AMS 24540M DCR- Bifacial (Trans. Backsheet)	AMS 24545M DCR- Bifacial (Trans. Backsheet)	AMS 24550M (Bifacial)
Product Warranty	12 Years			
Performance Warranty	Linear performance warranty for 25 years with 2% for 1st year degradation and 0.55% from year 2 to 25			
Approvals and Certificates	BIS certified as per IS/IEC standards			



# PV Panels

Polycrystalline Panels



## Solar Panels



Polycrystalline solar panels provide a cost-effective and reliable energy solution, utilizing multiple silicon crystals to ensure durability and stable performance. Their manufacturing process maximizes material use and minimizes waste, making them a more sustainable option. With a robust design that delivers consistent power output, they are well-suited for residential, commercial, and large-scale installations.



**Excellent Low-light Performance**



**Resilience to Extreme Weather**



**PID Resistance Technology**



**Advance EVA Encapsulation**



**25 Years Performance Warranty**



**5 & 12 Years Product Warranty**

**ALMM Approved**

**Enlisted under ALMM Order**

## Electrical Parameters @ STC#

Model Name	AMS 12170	ALP 24L335WM
Cell Type	Poly	Poly
No. of Cells	36	72
Peak Power P <sub>Max</sub> (Wp)	170	335
Rated Module Voltage (V)	12	24
Maximum Power Voltage V <sub>mp</sub> (V)	18.86	38.08
Maximum Power Current I <sub>mp</sub> (A)	9.02	8.80
Open Circuit Voltage V <sub>oc</sub> (V)	23.01	46.02
Short Circuit Current I <sub>sc</sub> (A)	9.61	9.43
Module Efficiency (%)	16.47%	16.85%
Maximum System Voltage (V)	600V	1500V
Maximum Series Fuse Rating	12A	20A

\* STC (1000W/m<sup>2</sup>), AM1.5, cell temperature 25° C°. Power Tolerance : 0/+5%. Power measurement accuracy:±3%

## Mechanical Data

Module Dimensions (mm)	1505x686	1986x1001
LxWxT	x35	x35
Module Weight (kgs)	11	21
IP Rating	IP 65	IP 67
Cable	1000mm length cables	
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	Composite Film	
Maximum Surface Load Capacity	5400 Pa (Pascals)	
Application Class	Class A (Safety Class II)	

## Permissible Operating Conditions

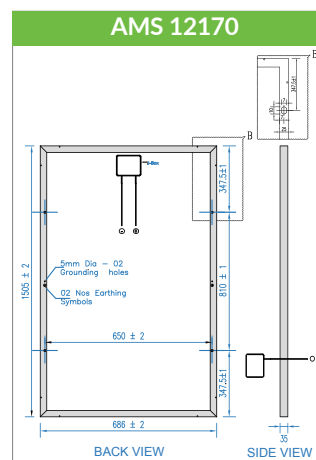
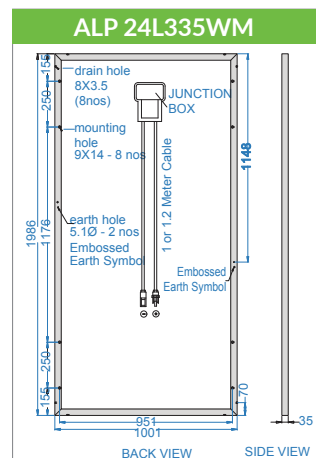
Operating Temperature	- 40°C to + 85°C	
Temp coefficient of Open Circuit Voltage	-0.23 %/°C	-0.3%/°C
Temp coefficient of Short Circuit Current	0.07 %/°C	+0.06%/°C
Temp coefficient of Power	-0.29 %/°C	-0.35%/°C

## 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	BIS certified as per IS/IEC standards	

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

## Solar Module Dimension



# GRID TIE INVERTERS

Perfect Blend of Safety and Efficiency



## On-Grid Inverters



The AMi range from Amaze is available in single phase configuration. With best-in-class reliability and compliance to safety standards, the inverters are available in capacities 3kw and 5kW.



Maximum Power Point Tracking



Anti-Islanding Protection



IV Curve Scanning



String Level Monitoring



10\* Years  
Warranty



>99%  
Efficiency

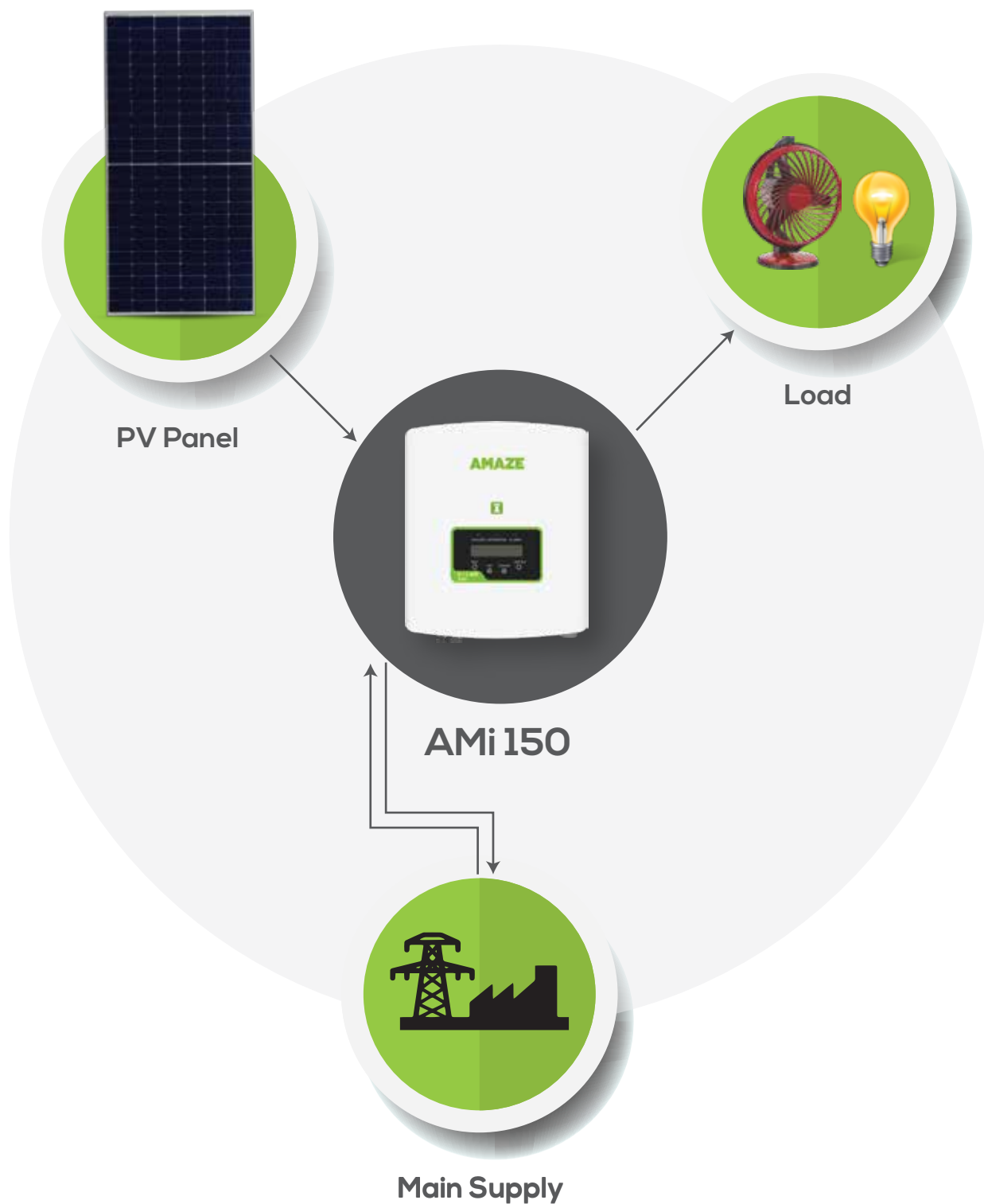


Remote  
Monitoring

\*8 years standard + 2 years extended warranty

## Solar Estimation Chart

Solution			Panel Connection Combination (Series-Parallel)	Approx. Roof Top Area Required (Sq. ft.)
GTI	PV Panel Watt	Number of MPPT		
AMi 3kW	585Wp x 7 No.s	1	7 (S)	480
AMi 5kW	585Wp x 12 No.s	2	12 (S)	720





## Single Phase

Model Name	AMi 130	AMi 150
Rated output power (kW)	3	5
<b>INPUT DC</b>		
Max. DC Input Power (kW)	4.5	7.5
Max. DC Input Voltage (V)	550	550
Start-up Voltage [V]	80	100
MPPT Voltage range (V)	70 - 500	90 - 550
Max input current per MPPT (A)	16A	16A/16A
Number of MPPT	1	2
Max Input Strings Number	1	2
<b>OUTPUT (AC)</b>		
Rated output power (kW)	3	5
Max. output power [kW]	3.3	5.5
Max. output Current [A]	15	22.7
Grid Frequency range (Hz)	50/60Hz	
Power Factor (at rated output power)	0.8 ... 0.8	
Total harmonic distortion [THDi]	< 3%	
Feed-in phase/connection phase	Single Phase	
<b>EFFICIENCY</b>		
Max. Efficiency	97.2%	97.7%
MPPT Efficiency	>99.5	
<b>PROTECTION</b>		
Inbuilt Protections	DC Reverse Polarity Protection, Short Circuit Protection, O/P Over Current Protection, O/P Over voltage protection, Insulation resistance monitoring, Residual current detection, surge protection, Anti-Islanding Protection, Temperature Protection	
<b>INTERFACE</b>		
DC Connection	MC4 Connectors	
Display	LCD 2X 20 Z	LED + Bluetooth App
Datalogger & Communication	RS485/GSM/Wi-Fi* (Optional)	
<b>GENERAL DATA</b>		
Topology	Transformerless	
Consumption @ night	< 1 W	
Operating Temperature Range	-25°C to 60°C	
Cooling Method	Natural Convection	
Relative Humidity	0 - 100 %	
Max. Operational Altitude	4000m	
Noise [dBA]	<20dBA	
Designed Lifetime	> 20 years	
Ingress Protection	IP66	
Dimensions (W*H*D) (mm)	310W*373H*160D	310W *543H *160D
Net weight (Kg)	7.4	8.9
<b>STANDARDS</b>		
Safety/EMC	BIS Certified as per IS/IEC standards	

\* Check availability of GSM or Wi-Fi dongle before ordering.

Technical specifications are subject to change without prior notice.

# AMS Series

For Savings & Backup



## Off-Grid Inverters



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.



**3 User Settable Saving Modes**



**Max Capacity Utilization**



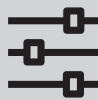
**Informative LED/LCD Display**



**Powerful Charging on Low Voltage**



**3 Years Warranty**



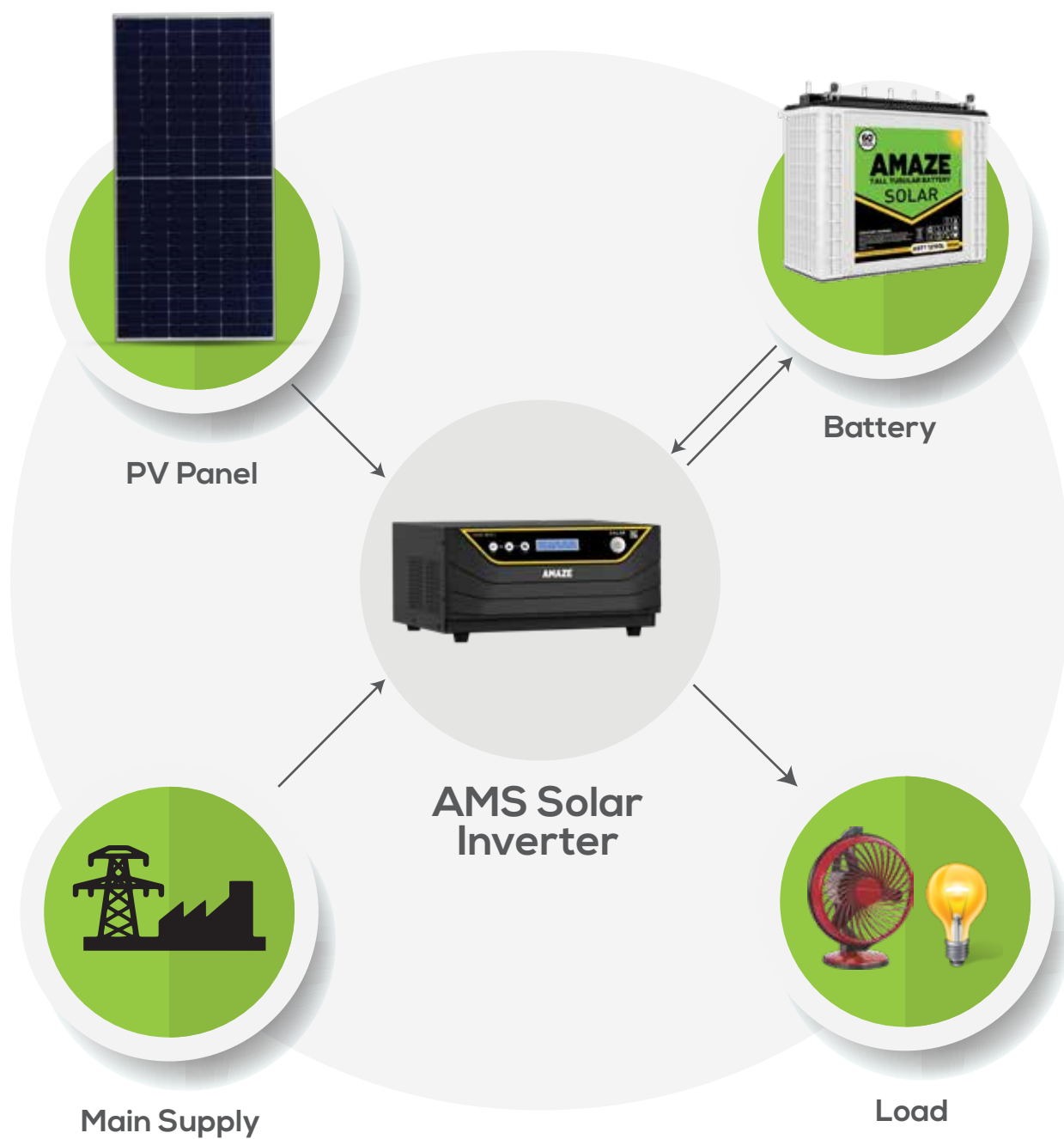
**New Saving modes**



**Max Capacity Utilization**

## Solar Estimation Chart

Solution			Panel Connection Combination (Series-Parallel)	Approx. Roof Top Area Required (Sq. ft.)
Solar Inverter	Solar Battery	PV Panel Watt		
AMS 875e	150Ah x 1	170Wp x 1 Nos		13.33
AMS 1175e	150Ah x 1	170Wp x 1 Nos		13.33
AMS 1475e	150Ah x 1	170Wp x 5 Nos	5 (P)	66.66
AMS 1875e	150Ah x 2	585Wp x 3 Nos	3 (P)	100.12
AMS 2375	150Ah x 2	585Wp x 4 Nos.	4 (P)	133.49



## Technical Specifications

Model Name	AMS 875e	AMS1175e	AMS1475e	AMS1875e	AMS 2375
Nominal Battery Voltage (Vdc)	1	1	1	2	2
Capacity (VA)	500VA	850VA	1100VA	1500VA	2000VA
Output Waveform	Sine wave				
SOLAR PHOTOVOLTAIC INPUT					
Charge Controller Type	PWM				
Charge Controller Rating	30A	50A	60A	40A	55A
Maximum PV Power	500Wp	850Wp	1100Wp	1500Wp	2000Wp
Input Voltage Range (Voc)	18V-25V	18V-25V	18V-25V	36V-60V	36V-60V
GRID INPUT					
Operating Voltage Range	90V-290 V				
GRID OUTPUT					
No Load Output	230V +/- 10V				
Output frequency battery mode	50 Hz +/- 0.5Hz				
Inverter Efficiency	>80%				
USER SELECTABLE SWITCHES					
Mode Selections	Solar/Solar+Grid/Grid+Solar				
Battery Type Selections	Tubular/Flat Plate/VRLA				
MAINS CHARGING CURRENT					
Solar Mode	0A*				
Solar + Grid Mode	10A±2A		15A±2A		
Grid + Solar Mode	15A±2A		20A±2A		
BATTERY					
No. of Batteries	1			2	
Battery Charging Current	0A,10A,15A		0A,15A,20A		
Type of Battery Supported	Tubular/Flat Plate/VRLA				
PROTECTIONS					
Overload	>105%				
Protections	Short circuit, Overload, Over temperature, Low Battery, No Load Shutdown				
Indications	Mains Available, Solar Charging, Grid Charging, Power Saving, System On, Low Battery, Overload				
DISPLAY INDICATIONS	LED INDICATIONS			LCD DISPLAY	
System ON indication	System ON LED Steady			Mains Available, Power Saving, Solar Current, Solar Power, System On, Grid Charging, Low Battery, Overload, No Load Shutdown	
Mains ON indication	ON Mains LED steady				
Charging ON indication	ON Mains LED steady + CHG. LED Steady				
Low battery pre-alarm indication	System ON LED Steady + Battery Low LED Blinking				
Low battery indication	Battery Low LED Steady				
Battery Charged Indication	ON Mains LED steady + CHG. LED Off				
Overload Indication	Overload LED Steady				
Short circuit indication in UPS mode	Overload LED Blinking/(ON Mains & Overload LED) Blinking				
DC overload indication	ON Mains LED + Charge LED Blinking				
Thermistor Open/Short Indication	ON Mains LED & Overload LED Steady				
Output Feedback open/Reverse	ON Mains LED & Overload LED Blinking				
Battery Charging Through Solar	Solar Charging LED Blinking				
Power Saving Mode	Power Saver Steady + Solar Chg. LED Blinking/Steady				
Battery Charging Through Solar + Mains	ON Mains LED + Charge LED Steady + Solar Charging LED Blinking				
No Load Shutdown	System ON LED Blinking				
Solar Over Current	Solar Charging LED Blink Faster				
GENERAL					
Net Weight (kg)	8.2 kg	11.8 kg	16.5 kg	17.1 kg	18.5 kg
Gross Weight (kg)	9.7 kg	13 kg	17.8 kg	18.5 kg	20 kg
Dimensions LxWxH (mm)	320x302x130 mm			320x275x150 mm	

Technical specifications are subject to change without prior notice.



# PCU Series

Superior Performance



## Off-Grid Inverters



PCU Series from Amaze allows smart management of Solar Power, Grid Supply and Battery to deliver uninterrupted power for all electrical applications. Designed for high performance against the typically tough Indian grid conditions, PCU is available in 5kVA.



Customisable Saving Modes



Max Capacity Utilization



User-friendly LCD Display



Smart Solar Optimization



3 Years  
Warranty



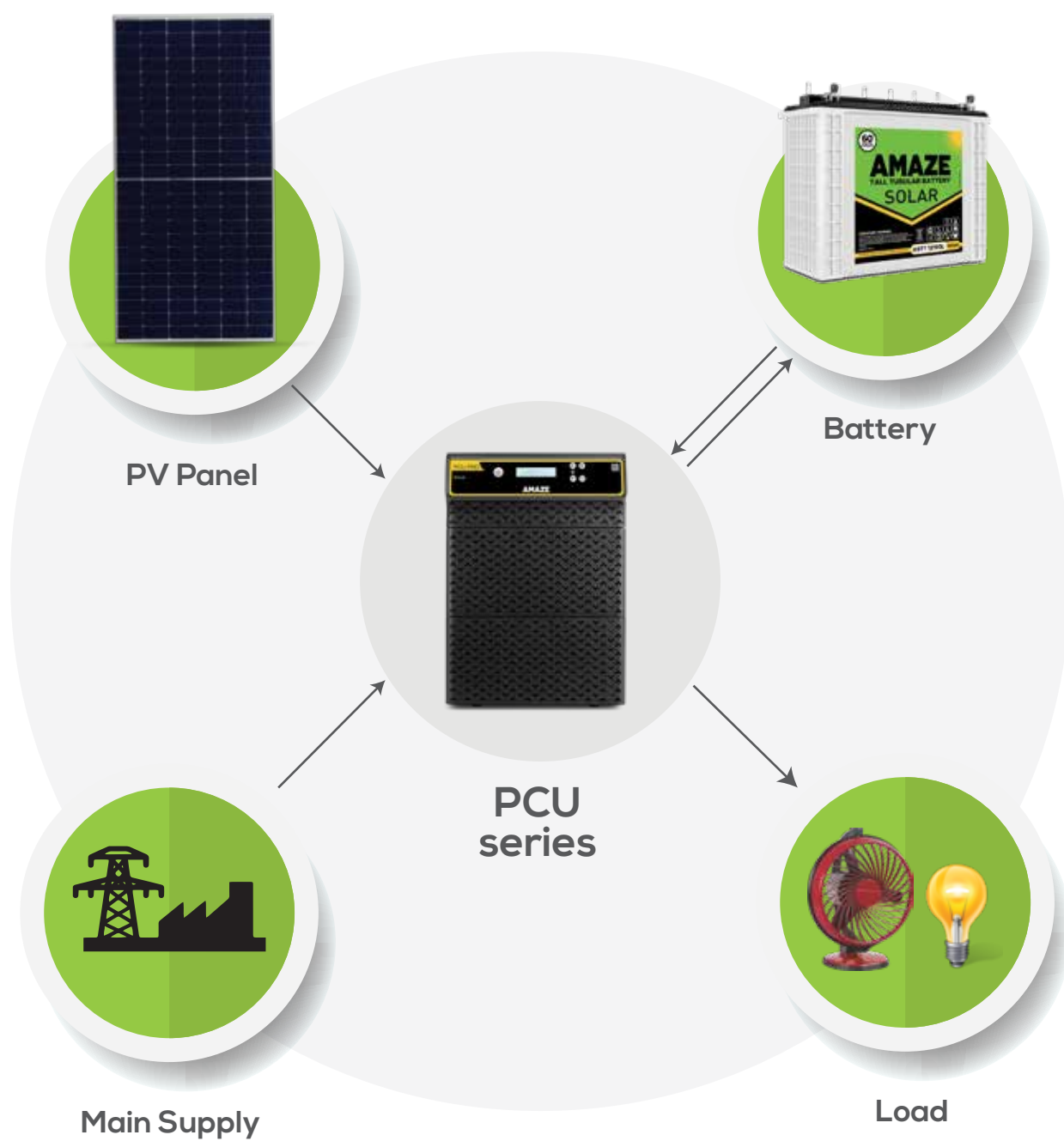
Smart Solar  
optimization



User Controller  
Settings

## Solar Estimation Chart

Solution			Panel Connection Combination (Series-Parallel)	Approx. Roof Top Area Required (Sq. ft.)
Solar PCU	Solar Battery	PV Panel Watt		
PCU 5KVA	150Ah x 4	585Wp x 10 Nos.	2 (S) 5 (P)	334



## Technical Specifications

Model Name	PCU 5KVA
Capacity (kVA)	5kVA
Nominal Battery Voltage (Vdc)	48V
Output Waveform	Sine Wave
<b>SOLAR PHOTOVOLTAIC INPUT</b>	
Type of Charger	PWM
Maximum PV power	5000W
Solar Input Voltage range (Voc)	65V-120V
Charge Controller Rating	70A
<b>GRID INPUT</b>	
Input Supply Phases	Single Phase
Operating Voltage range	140V-290V
Nominal Grid Current (import)	18
<b>BATTERY</b>	
Battery Charging Current from Solar	30A
Battery Charging Current from Mains	0A,15A,20A
Battery Charging Stages	Boost, Absorption, Float
Nominal Grid Current (import)	Tubular/VRLA/Flat Plate
<b>UPS</b>	
Switching Element	MOSFET
Control	32 Bit DSP controlled
Nominal Output Voltage (V)	230V ± 5%
Output Waveform	Pure Sine Wave
Nominal Frequency	50 Hz
Nominal Output Current	7A
Output Voltage Distortion(THD)	< 3%
Overload at nominal output voltage	110-150% for 12 Secs 5 times retry, 200% for 5 Secs
<b>SYSTEM DATA</b>	
Transfer Time	<20 mS
Protection	Reverse Polarity; Surge Protection; Over Voltage; Current Limit; Over/Under Frequency; Short Circuit; Over Temperature
Display Parameters	Battery Side: Battery Charging/Discharging Status   PV Side: Current, Power   Grid Side: Voltage, Current Load Side: Load in %
Indications	System Power On, Inverter ON(Load On Inverter), Solar Available/Solar Charging, Load On Grid/Grid Charging, Battery Under Voltage, System Trip/Fail
<b>ENVIRONMENT</b>	
IP Protection Level	IP-20
Operating Temperature	0-45 °C
Cooling	Forced Air Cooling
Max. Relative Humidity @ 25 °C	Up to 95% (non-condensing)
Max. Altitude above sea level without de-rating (m)	1000 m
<b>GENERAL</b>	
Dimension (WxDxH) [mm]	300 x 417 x 415
Net Weight (Kg)	38kg

Technical specifications are subject to change without prior notice.

# PCU PRO Series

Superior Performance



## Off-Grid Inverters



PCU Pro range from Amaze allows smart management of Solar Power, Grid Supply and Battery to deliver uninterrupted power for all electrical applications. Designed for high performance against the typically tough Indian grid conditions, PCU PRO range is available from 2kVA to 10.1kVA



Maximum Power Point Tracking



Guaranteed Safety



User-friendly LCD Display



Smart Solar Optimization



3 Years  
Warranty



Smart Solar  
optimization

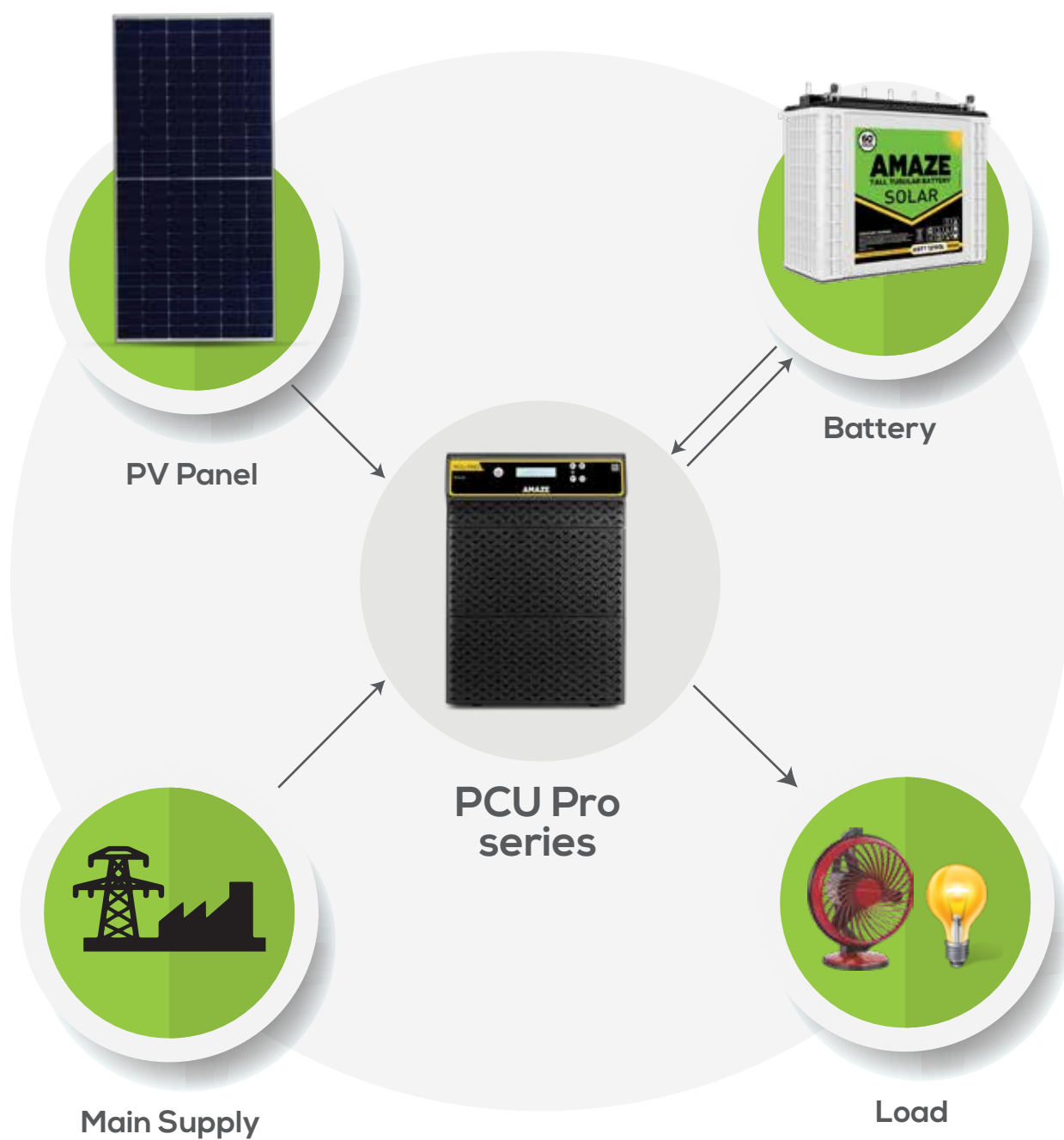


User Controller  
Settings



## Solar Estimation Chart

Solution			Panel Connection Combination (Series-Parallel)	Approx. Roof Top Area Required (Sq. ft.)
Solar PCU	Solar Battery	PV Panel Watt		
PCU PRO 2KVA	150Ah x 2	585Wp x 4 Nos.	4 (P)	133.49
PCU PRO 3KVA	150Ah x 3	585Wp x 6 Nos.	3 (S) 2 (P)	200.23
PCU PRO 5KVA	150Ah x 4	585Wp x 10 Nos.	5 (S) 2 (P)	333.72
PCU MPPT 7.5KVA	150Ah x 8	585Wp x 16 Nos.	8 (S) 2 (P)	533.95
PCU PRO 10.1KVA	150Ah x 10	585Wp x 20 Nos.	5 (S) 4 (P)	667.44



## Technical Specifications

Model Name	PCU PRO 2KVA	PCU PRO 3KVA
Capacity (kVA)	2kVA	3kVA
Nominal Battery Voltage (Vdc)	24V	36V
Output Waveform	Sinewave	
<b>SOLAR PHOTOVOLTAIC INPUT</b>		
Type of Charger	MPPT	
Maximum PV power	2000W	3000W
Solar Input Voltage (Voc)	55V-107V	75V-150V
Solar Input Voltage range (Vmp)	45V-85V	60V-120V
No. of MPPT Channels	1	
<b>GRID INPUT</b>		
Input Supply Phase	Single Phase	
Input Voltage Mains mode (Regulated UPS Mode)	180-260 Vac	
Mains mode ( Unregulated UPS Mode)	110V-280Vac	
<b>BATTERY</b>		
No. of Batteries	2	3
Battery Charging Current from Solar	30A	
Battery Charging Current from Grid	0A, 14A, 17A, 20A	
Charging Stages	Boost, Absorption, Float	
Type of Battery	Tubular/SMF/Flat	
<b>INVERTER</b>		
Switching Element	MOSFET	
Control	16 Bit DSP controlled	
Nominal Output Voltage (V)	230V $\pm$ 5%	
Output Supply Phase	1 Phase 2 Wire	
Nominal Frequency	50 Hz	
Nominal Output Current	7.5A	11A
Output Voltage Distortion(THD)	$\leq$ 3%	
<b>SYSTEM DATA</b>		
Transfer Time	$\leq$ 20 mS	
Protection	Overload Mains Load, Overload on Battery, Reverse Polarity, Short Circuit, Over Temperature, Low Battery	
Display Parameters	UPS On, Battery Low, Mains On, Smart Charge/ Boost Charging, Battery Charged/ Float Charge, Overload, Over Temperature Protection, Short Circuit under Battery Mode, MCB Trip/ Short Circuit in Mains Mode	
Indications	UPS On, Battery Low, Mains On, Smart Charge/ Boost Charging, Battery Charged/ Float Charge, Overload, Over Temperature Protection, Short Circuit under Battery Mode, MCB Trip/ Short Circuit in Mains Mode	
<b>ENVIRONMENT</b>		
IP Protection Level	IP20	
Operating Temperature	0-45 °C	
Storage Temperature	0-50°C	
Cooling	Forced Air Cooling	
Max. Relative Humidity @ 25 °C	Up to 95% (non-condensing)	
<b>GENERAL</b>		
Dimension (L*W*H) [mm]	396x300x270	300x432x429
Net Weight (kg)	27.7kg	31.5kg

Technical specifications are subject to change without prior notice.

## Technical Specifications

Model Name	PCU PRO 5KVA
Capacity (kVA)	5kVA
Nominal Battery Voltage (Vdc)	48V
Output Waveform	Sinewave
<b>SOLAR PHOTOVOLTAIC INPUT</b>	
Type of Charger	MPPT
Maximum PV power	5000W
Solar Input Voltage (Voc)	130V-220V
Solar Input Voltage range (Vmp)	110V-180V
No. of MPPT Channels	1
<b>GRID INPUT</b>	
Input Supply Phase	Single Phase
Input Voltage Mains mode (Regulated UPS Mode)	180-260 Vac
Mains mode ( Unregulated UPS Mode)	140V-280V
<b>BATTERY</b>	
No. of Batteries	4
Battery Charging Current from Solar	30A
Battery Charging Current from Grid	0A, 4A-20A (user settable)
Charging Stages	Boost, Absorption, Float
Type of Battery	Tubular/SMF/Flat
<b>INVERTER</b>	
Switching Element	MOSFET
Control	32 Bit DSP Controlled
Nominal Output Voltage (V)	230V $\pm$ 5%
Output Supply Phase	1 Phase 2 Wire
Nominal Frequency	50 Hz
Nominal Output Current	17.5A+/-1A
Output Voltage Distortion(THD)	$\leq$ 5%
<b>SYSTEM DATA</b>	
Transfer Time	$\leq$ 20 mS
Protection	Overload Mains Load, Overload on Battery, Reverse Polarity, Short Circuit, Over Temperature, Low Battery
Display Parameters	UPS On, Battery Low, Mains On, Smart Charge/ Boost Charging, Battery Charged/ Float Charge, Overload, Over Temperature Protection, Short Circuit under Battery Mode, MCB Trip/ Short Circuit in Mains Mode
Indications	UPS On, Battery Low, Mains On, Smart Charge/ Boost Charging, Battery Charged/ Float Charge, Overload, Over Temperature Protection, Short Circuit under Battery Mode, MCB Trip/ Short Circuit in Mains Mode
<b>ENVIRONMENT</b>	
IP Protection Level	IP20
Operating Temperature	0-45 °C
Storage Temperature	0-50°C
Cooling	Forced Air Cooling
Max. Relative Humidity @ 25 °C	Up to 95% (non-condensing)
<b>GENERAL</b>	
Dimension (L*W*H) [mm]	511x300x484
Net Weight (kg)	54 kg

Technical specifications are subject to change without prior notice.

## Technical Specifications

Model Name	PCU MPPT 7.5KVA	PCU PRO 10.1KVA
Capacity (kVA)	7.5kVA	10.1kVA
Nominal Battery Voltage (Vdc)	96V	120V
Output Waveform	Sinewave	
<b>SOLAR PHOTOVOLTAIC INPUT</b>		
Type of Charger	MPPT	
Maximum PV power	7500W	10000W
Solar Input Voltage (Voc)	250V-400V	200V-400V
Solar Input Voltage range (Vmp)	200V-400V	150V-320V
No. of MPPT Channels	1	
<b>GRID INPUT</b>		
Input Supply Phase	Single Phase	
Input Voltage Mains mode (Regulated UPS Mode)	180-260 Vac	
Mains mode ( Unregulated UPS Mode)	140V-280V	
<b>BATTERY</b>		
No. of Batteries	8	10
Battery Charging Current from Solar	30A	
Battery Charging Current from Grid	0A, 4A-20A (user settable)	
Charging Stages	Boost, Absorption, Float	
Type of Battery	Tubular/SMF/Flat	
<b>INVERTER</b>		
Switching Element	IGBT	
Control	32 Bit DSP Controlled	
Nominal Output Voltage (V)	230V $\pm$ 5%	
Output Supply Phase	1 Phase 2 Wire	
Nominal Frequency	50 Hz	
Nominal Output Current	26A+/-1A	34A+/-1A
Output Voltage Distortion(THD)	$\leq$ 5%	
<b>SYSTEM DATA</b>		
Transfer Time	$\leq$ 20 mS	
Protection	Overload Mains Load, Overload on Battery, Reverse Polarity, Short Circuit, Over Temperature, Low Battery	
Display Parameters	UPS On, Battery Low, Mains On, Smart Charge/ Boost Charging, Battery Charged/ Float Charge, Overload, Over Temperature Protection, Short Circuit under Battery Mode, MCB Trip/ Short Circuit in Mains Mode	
Indications	UPS On, Battery Low, Mains On, Smart Charge/ Boost Charging, Battery Charged/ Float Charge, Overload, Over Temperature Protection, Short Circuit under Battery Mode, MCB Trip/ Short Circuit in Mains Mode	
<b>ENVIRONMENT</b>		
IP Protection Level	IP20	
Operating Temperature	0-45 °C	
Storage Temperature	0-50°C	
Cooling	Forced Air Cooling	
Max. Relative Humidity @ 25 °C	Up to 95% (non-condensing)	
<b>GENERAL</b>		
Dimension (L*W*H) [mm]	690x400x500	740x400x580
Net Weight (kg)	78 kg	101 kg

Technical specifications are subject to change without prior notice.



# AMP 3575

Superior Performance

**AMAZE**  
SOLAR

## Off-Grid Inverters



AMP 3575 from Amaze allows smart management of Solar Power, Grid Supply and Battery to deliver uninterrupted power for all electrical applications. Designed for high performance against the typically tough Indian grid conditions, AMP 3575 is available in 3kVA.



Customisable Saving Modes



Guaranteed Safety



User-friendly LCD Display



Smart Solar Optimization



3 Years  
Warranty



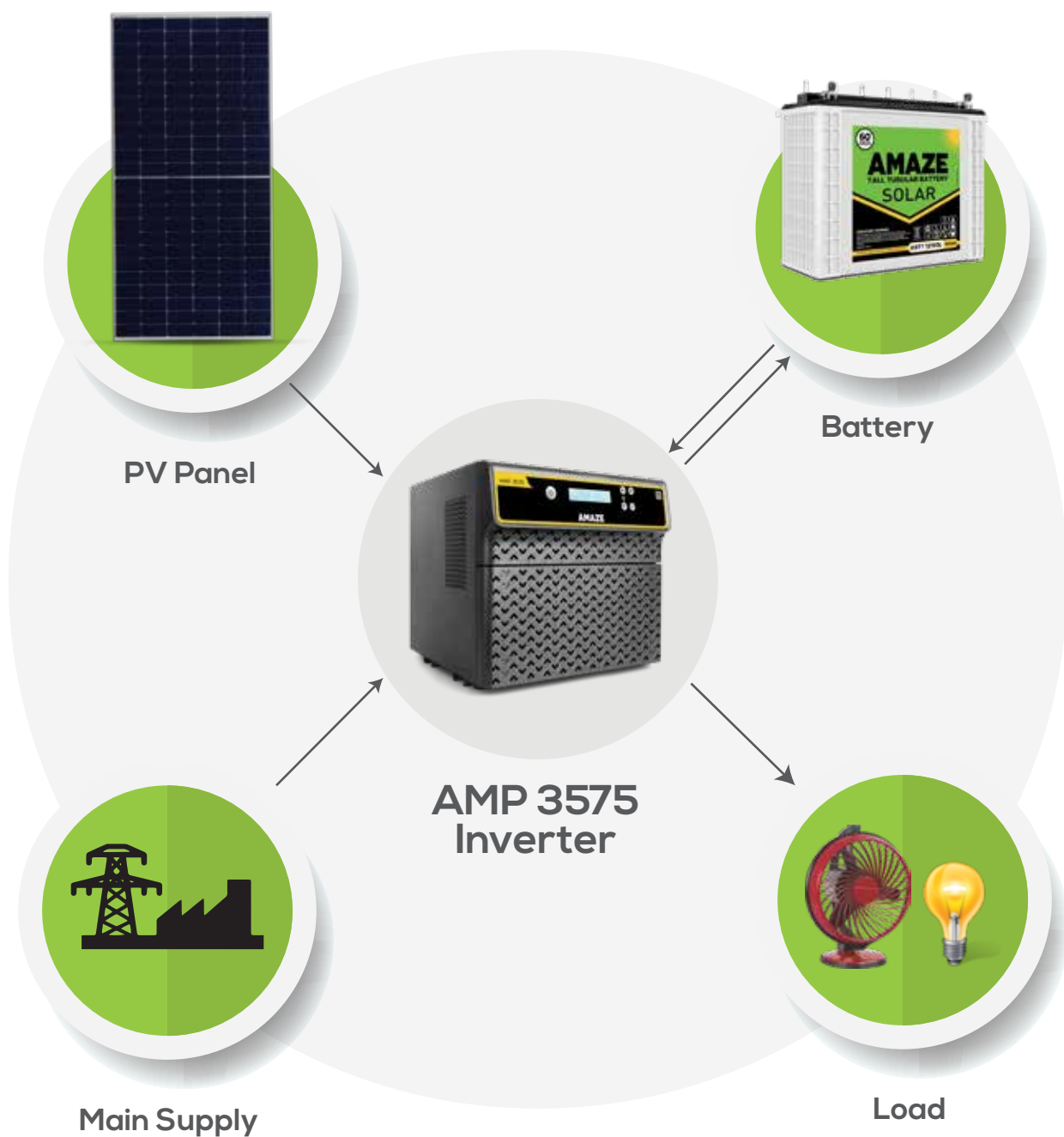
Pure Sine  
Wave Output



1.5 HP Water  
Motor\*

## Solar Estimation Chart

Solution			Panel Connection Combination (Series-Parallel)	Approx. Roof Top Area Required (Sq. ft.)
Solar Inverter	Solar Battery	PV Panel Watt		
AMP 3575 3KVA	150Ah x 2	585Wp x 4 Nos	4 (P)	133.49



## Technical Specifications

Model Name	AMP 3575	
Nominal Battery Voltage (Vdc)	24V	
Capacity (VA)	3000VA	
Output Waveform	Sine Wave	
SOLAR PHOTOVOLTAIC INPUT		
Charge Controller Type	PWM	
Charge Controller Rating	50A	
Maximum PV Power	2200Wp	
Input Voltage range (Voc)	36V-60V	
GRID INPUT		
Operating Voltage Range	90V-290V	
GRID OUTPUT		
No Load Output	230V +/- 10V	
Output frequency battery mode	50 Hz +/- 0.5Hz	
Inverter Efficiency	>80%	
USER SELECTABLE SWITCHES		
Mode Selections	Solar/Solar+Grid/Grid+Solar	
Battery Type Selections	Tubular/Flat Plate/VRLA	
MAINS CHARGING CURRENT		
Solar Mode	0A*	
Solar + Grid Mode	10A±2A	
Grid + Solar Mode	15A±2A	
BATTERY		
No. of Batteries	2	
Battery Charging Current	0A, 10A, 15A	
Type of Battery Supported	Tubular/Flat Plate/SMF	
PROTECTIONS		
Overload	>100%	
Protections	Short circuit, Overload, Over temperature, Low Battery, No Load Shutdown	
Indications	Mains Available, Solar Charging, Grid Charging, Power Saving, System On, Low Battery, Overload	
DISPLAY INDICATIONS	LED INDICATIONS	LCD DISPLAY
System ON indication	System ON LED Steady	Mains Available, Power Saving, Solar Current, Solar Power, System On, Grid Charging, Low Battery, Overload, No Load Shutdown
Mains ON indication	ON Mains LED steady	
Charging ON indication	ON Mains LED steady + CHG. LED Steady	
Low battery pre-alarm indication	System ON LED Steady + Battery Low LED Blinking	
Low battery indication	Battery Low LED Steady	
Battery Charged Indication	ON Mains LED steady + CHG. LED Off	
Overload Indication	Overload LED Steady	
Short circuit indication in UPS mode	Overload LED Blinking/(ON Mains & Overload LED) Blinking	
DC overload indication	ON Mains LED + Charge LED Blinking	
Thermistor Open/Short Indication	ON Mains LED & Overload LED Steady	
Output Feedback open/Reverse	ON Mains LED & Overload LED Blinking	
Battery Charging Through Solar	Solar Charging LED Blinking	
Power Saving Mode	Power Saver Steady + Solar Chg. LED Blinking/Steady	
Battery Charging Through Solar + Mains	ON Mains LED + Charge LED Steady + Solar Charging LED Blinking	
No Load Shutdown	System ON LED Blinking	
Solar Over Current	Solar Charging LED Blink Faster	
GENERAL		
Net Weight (Kg)	24.2 kg	
Gross weight (Kg)	25.7 kg	
Dimensions LxWxH (mm)	300x291x284mm	

Technical specifications are subject to change without prior notice.

# AMH 3 Phase

Superior Performance

**AMAZE**  
**SOLAR**



3 Phase Solar Hybrid TX AMH is designed with advanced technology. It adopts double transform high frequency and high-performance digital control technique (DSP), with perfect protection, super network management function, reasonable man-machine interface, and a series of precision designs to meet high-reliability requirements. Experience a power that integrates reliability, safety, and maintainability characteristics.



**Export Excess Power  
Generated & Also Get Backup**



**User Selectable Priority Settings**



**Anti-Islanding protection**



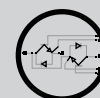
**Remote Monitoring**



**3 Years  
Warranty**



**Advanced  
DSP Control**



**IGBT Based  
Rectifier**

## Applications



Petrol Pump



AC Unit



Cold Storage



Microgrid



Factory & Dairy  
Equipment



Water Pump



ATM



Farmhouse



Primary Health  
Care Center



Rural Bank



Government  
Offices



Institutions



PV Panel



Battery



AMH 3 Phase  
Inverter



Main Supply



Load

System Rating (kVA/kW)	10.5kVA/8.4kW
<b>SOLAR</b>	
Open circuit voltage	400V
Maximum PV Power	10.5kW
Charge Controller	MPPT Charge Controller
MPPT Voltage Range	200 - 380
Switching Element	IGBT
Type of Charger	MPPT
Charger Efficiency	>95%
<b>GRID</b>	
Input Supply	415 VAC, 3 Phase, 4 wire (+15% , -15%)
Input Frequency	50Hz ± 6%
<b>BATTERY</b>	
Battery Voltage	120VDC
Grid charger type	Bi-Directional
Charging current from grid	15A for 150Ah battery/20A for 200Ah Battery or, as required by any other battery (up to inverter kVA Capacity)
Battery Type	Lead Acid/SMF
<b>INVERTER</b>	
Switching Element	IGBT
Output wave form	Pure Sine Wave
Output Nominal Voltage	415VAC ±2%, 3Ph
Output Frequency	50Hz ±1%
Load Power Factor	0.6 lag to 1 (within VA and kW rating)
Inverter Peak Efficiency	90%
Vth with 100% linear load	Mains mode: Same as Grid inverter mode <3%
Galvanic isolation	Inbuilt isolation transformation inverter output
Overload conditions	110% for 60 sec / 125% for 10 sec/150% for 1 sec
<b>PROTECTION</b>	
Protection	Input Under and Over voltage, Input Under and Over Frequency, Output Overload, Output short circuit, Output over and Under Voltage
	Over Temperature Array Reverse Polarity, Battery Over and Under voltage
<b>DISPLAY PARAMETER, LED INDICATION AND ALARM</b>	
Display Parameter	Grid-Voltage Current Power Output voltage, Current total Power, Load Percentage. Battery - voltage, current DC Power Solar-Voltage, Current Power. Statistics - KWH (Grid import, Grid Export, Inverter Battery IN and OUT, Solar) Event log (5 No's/option USB Storage: upto 1000 no's)
LED Indication	Grid ON/OFF, Grid Static switch ON/OFF, inverter ON/OFF, inverter static Switch ON/OFF, Load ON/OFF, Battery Charging and Discharging
Alarm	Audible alarm for fault conditions and warnings
<b>CONFIGURATION</b>	
Modes	2 different priority modes selectable from display (Solar-Battery-Grid) & (Solar-Grid-Battery)
Parameter Setting	All main Parameters can be set through LCD Display
Bypass	Manual bypass switch available for maintenance and service
<b>ENCLOSURE</b>	
Degree of protection	IP 20
Cooling	Forced Air Cooling
Color	RAL 5013 Cobalt Blue
Dimensions (L*W*H)mm	710 x 300 x 790
Netweight (Approx in Kg's)	130
<b>ENVIRONMENT</b>	
Temperature Operating	0-40° C
Max. Relative humidity@25° (non condensing)	Upto 95%
Max. Altitude above sea level without de-rating	upto 1000 mtr



System Rating (kVA/kW)	15kVA/12kW	20kVA/16kW
<b>SOLAR</b>		
Open circuit voltage	400V	500V
Maximum PV Power	15kW	20kW
Charge Controller	MPPT Charge Controller	
MPPT Voltage Range	200 - 380	300 - 480
Switching Element	IGBT	
Type of Charger	MPPT	
Charger Efficiency	>95%	
<b>GRID</b>		
Input Supply	415 VAC, 3 Phase, 4 wire (+15% , -15%)	
Input Frequency	50Hz ± 6%	
<b>BATTERY</b>		
Battery Voltage	180VDC	240VDC
Grid charger type	Bi-Directional	
Charging current from grid	15A for 150Ah battery/20A for 200Ah Battery or, as required by any other battery (up to inverter kVA Capacity)	
Battery Type	Lead Acid/SMF	
<b>INVERTER</b>		
Switching Element	IGBT	
Output wave form	Pure Sine Wave	
Output Nominal Voltage	415VAC ±2%, 3Ph	
Output Frequency	50Hz ±1%	
Load Power Factor	0.6 lag to 1 (within VA and kW rating)	
Inverter Peak Efficiency	90%	
Vth with 100% linear load	Mains mode: Same as Grid inverter mode <3%	
Galvanic isolation	Inbuilt isolation transformation inverter output	
Overload conditions	110% for 60 sec / 125% for 10 sec/150% for 1 sec	
<b>PROTECTION</b>		
Protection	Input Under and Over voltage, Input Under and Over Frequency, Output Overload, Output short circuit, Output over and Under Voltage	
	Over Temperature Array Reverse Polarity, Battery Over and Under voltage	
<b>DISPLAY PARAMETER, LED INDICATION AND ALARM</b>		
Display Parameter	Grid-Voltage Current Power Output voltage, Current total Power, Load Percentage. Battery - voltage, current DC Power Solar-Voltage, Current Power. Statistics - KWH (Grid import, Grid Export, Inverter Battery IN and OUT, Solar) Event log (5 No's/option USB Storage: upto 1000 no's)	
LED Indication	Grid ON/OFF, Grid Static switch ON/OFF, inverter ON/OFF, inverter static Switch ON/OFF, Load ON/OFF, Battery Charging and Discharging	
Alarm	Audible alarm for fault conditions and warnings	
<b>CONFIGURATION</b>		
Modes	2 different priority modes selectable from display (Solar-Battery-Grid) & (Solar-Grid-Battery)	
Parameter Setting	All main Parameters can be set through LCD Display	
Bypass	Manual bypass switch available for maintenance and service	
<b>ENCLOSURE</b>		
Degree of protection	IP 20	
Cooling	Forced Air Cooling	
Color	RAL 5013 Cobalt Blue	
Dimensions (L*W*H)mm	770 x 400 x 880	
Netweight (Approx in Kg's)	154	
<b>ENVIRONMENT</b>		
Temperature Operating	0-40° C	
Max. Relative humidity@25° (non condensing)	Upto 95%	
Max. Altitude above sea level without de-rating	upto 1000 mtr	

System Rating (kVA/kW)	25kVA/20kW
<b>SOLAR</b>	
Open circuit voltage	500V
Maximum PV Power	25kW
Charge Controller	MPPT Charge Controller
MPPT Voltage Range	300 - 480
Switching Element	IGBT
Type of Charger	MPPT
Charger Efficiency	>95%
<b>GRID</b>	
Input Supply	415 VAC, 3 Phase, 4 wire (+15% , -15%)
Input Frequency	50Hz ± 6%
<b>BATTERY</b>	
Battery Voltage	240VDC
Grid charger type	Bi-Directional
Charging current from grid	15A for 150Ah battery/20A for 200Ah Battery or, as required by any other battery (up to inverter kVA Capacity)
Battery Type	Lead Acid/SMF
<b>INVERTER</b>	
Switching Element	IGBT
Output wave form	Pure Sine Wave
Output Nominal Voltage	415VAC ±2%, 3Ph
Output Frequency	50Hz ±1%
Load Power Factor	0.6 lag to 1 (within VA and kW rating)
Inverter Peak Efficiency	90%
Vth with 100% linear load	Mains mode: Same as Grid inverter mode <3%
Galvanic isolation	Inbuilt isolation transformation inverter output
Overload conditions	110% for 60 sec / 125% for 10 sec/150% for 1 sec
<b>PROTECTION</b>	
Protection	Input Under and Over voltage, Input Under and Over Frequency, Output Overload, Output short circuit, Output over and Under Voltage
	Over Temperature Array Reverse Polarity, Battery Over and Under voltage
<b>DISPLAY PARAMETER, LED INDICATION AND ALARM</b>	
Display Parameter	Grid-Voltage Current Power Output voltage, Current total Power, Load Percentage. Battery - voltage, current DC Power Solar-Voltage, Current Power. Statistics - KWH (Grid import, Grid Export, Inverter Battery IN and OUT, Solar) Event log (5 No's/option USB Storage: upto 1000 no's)
LED Indication	Grid ON/OFF, Grid Static switch ON/OFF, inverter ON/OFF, inverter static Switch ON/OFF, Load ON/OFF, Battery Charging and Discharging
Alarm	Audible alarm for fault conditions and warnings
<b>CONFIGURATION</b>	
Modes	2 different priority modes selectable from display (Solar-Battery-Grid) & (Solar-Grid-Battery)
Parameter Setting	All main Parameters can be set through LCD Display
Bypass	Manual bypass switch available for maintenance and service
<b>ENCLOSURE</b>	
Degree of protection	IP 20
Cooling	Forced Air Cooling
Color	RAL 5013 Cobalt Blue
Dimensions (L*W*H)mm	900 x 400 x 880
Netweight (Approx in Kg's)	180
<b>ENVIRONMENT</b>	
Temperature Operating	0-40° C
Max. Relative humidity@25° (non condensing)	Upto 95%
Max. Altitude above sea level without de-rating	upto 1000 mtr

System Rating (kVA/kW)	30kVA/24kW		40kVA/32kW	50kVA/40kW
SOLAR				
Open circuit voltage	750V			
Maximum PV Power	30kW	40kW	50kW	
Charge Controller	MPPT Charge Controller			
MPPT Voltage Range	540 - 730	540 - 730	540 - 730	
Switching Element	IGBT			
Type of Charger	MPPT			
Charger Efficiency	>95%			
GRID				
Input Supply	415 VAC, 3 Phase, 4 wire (+15% , -15%)			
Input Frequency	50Hz ± 6%			
BATTERY				
Battery Voltage	360VDC			
Grid charger type	Bi-Directional			
Charging current from grid	15A for 150Ah battery/20A for 200Ah Battery or, as required by any other battery (up to inverter kVA Capacity)			
Battery Type	Lead Acid/SMF			
INVERTER				
Switching Element	IGBT			
Output wave form	Pure Sine Wave			
Output Nominal Voltage	415VAC ±2%, 3Ph			
Output Frequency	50Hz ±1%			
Load Power Factor	0.6 lag to 1 (within VA and kW rating)			
Inverter Peak Efficiency	90%			
Vth with 100% linear load	Mains mode: Same as Grid inverter mode <3%			
Galvanic isolation	Inbuilt isolation transformation inverter output			
Overload conditions	110% for 60 sec / 125% for 10 sec/150% for 1 sec			
PROTECTION				
Protection	Input Under and Over voltage, Input Under and Over Frequency, Output Overload, Output short circuit, Output over and Under Voltage			
	Over Temperature Array Reverse Polarity, Battery Over and Under voltage			
DISPLAY PARAMETER, LED INDICATION AND ALARM				
Display Parameter	Grid-Voltage Current Power Output voltage, Current total Power, Load Percentage. Battery - voltage, current DC Power Solar-Voltage, Current Power. Statistics - KWH (Grid import, Grid Export, Inverter Battery IN and OUT, Solar) Event log (5 No's/option USB Storage:upto 1000 no's)			
LED Indication	Grid ON/OFF, Grid Static switch ON/OFF, inverter ON/OFF, inverter static Switch ON/OFF, Load ON/OFF, Battery Charging and Discharging			
Alarm	Audible alarm for fault conditions and warnings			
CONFIGURATION				
Modes	2 different priority modes selectable from display (Solar-Battery-Grid) & (Solar-Grid-Battery)			
Parameter Setting	All main Parameters can be set through LCD Display			
Bypass	Manual bypass switch available for maintenance and service			
ENCLOSURE				
Degree of protection	IP 20			
Cooling	Forced Air Cooling			
Color	RAL 5013 Cobalt Blue			
Dimensions (L*W*H)mm	925 x 535 x 1190			
Netweight (Approx in Kg's)	250	310	325	
ENVIRONMENT				
Temperature Operating	0-40° C			
Max. Relative humidity@25° (non condensing)	Upto 95%			
Max. Altitude above sea level without de-rating	upto 1000 mtr			

Stock Availability: 8 to 10 weeks from date of Purchase Order

\*Technical specifications are subject to change without prior notice

System Rating (kVA/kW)	60kVA/48kW	80kVA/64kW
<b>SOLAR</b>		
Open circuit voltage	750V	750V
Maximum PV Power	60kW	80kW
Charge Controller	MPPT Charge Controller	
MPPT Voltage Range	540 - 730	540 - 730
Switching Element	IGBT	
Type of Charger	MPPT	
Charger Efficiency	>95%	
<b>GRID</b>		
Input Supply	415 VAC, 3 Phase, 4 wire (+15% , -15%)	
Input Frequency	50Hz ± 6%	
<b>BATTERY</b>		
Battery Voltage	360VDC	
Grid charger type	Bi-Directional	
Charging current from grid	15A for 150Ah battery/20A for 200Ah Battery or, as required by any other battery (up to inverter kVA Capacity)	
Battery Type	Lead Acid/SMF	
<b>INVERTER</b>		
Switching Element	IGBT	
Output wave form	Pure Sine Wave	
Output Nominal Voltage	415VAC ±2%, 3Ph	
Output Frequency	50Hz ±1%	
Load Power Factor	0.6 lag to 1 (within VA and kW rating)	
Inverter Peak Efficiency	90%	
Vth with 100% linear load	Mains mode: Same as Grid inverter mode <3%	
Galvanic isolation	Inbuilt isolation transformation inverter output	
Overload conditions	110% for 60 sec / 125% for 10 sec/150% for 1 sec	
<b>PROTECTION</b>		
Protection	Input Under and Over voltage, Input Under and Over Frequency, Output Overload, Output short circuit, Output over and Under Voltage	
	Over Temperature Array Reverse Polarity, Battery Over and Under voltage	
<b>DISPLAY PARAMETER, LED INDICATION AND ALARM</b>		
Display Parameter	Grid-Voltage Current Power Output voltage, Current total Power, Load Percentage. Battery - voltage, current DC Power Solar-Voltage, Current Power. Statistics - KWH (Grid import, Grid Export, Inverter Battery IN and OUT, Solar) Event log (5 No's/option USB Storage:upto 1000 no's)	
LED Indication	Grid ON/OFF, Grid Static switch ON/OFF, inverter ON/OFF, inverter static Switch ON/OFF, Load ON/OFF, Battery Charging and Discharging	
Alarm	Audible alarm for fault conditions and warnings	
<b>CONFIGURATION</b>		
Modes	2 different priority modes selectable from display (Solar-Battery-Grid) & (Solar-Grid-Battery)	
Parameter Setting	All main Parameters can be set through LCD Display	
Bypass	Manual bypass switch available for maintenance and service	
<b>ENCLOSURE</b>		
Degree of protection	IP 20	
Cooling	Forced Air Cooling	
Color	RAL 5013 Cobalt Blue	
Dimensions (L*W*H)mm	1000 x 700 x 1500	
Netweight (Approx in Kg's)	510	550
<b>ENVIRONMENT</b>		
Temperature Operating	0-40° C	
Max. Relative humidity@25° (non condensing)	Upto 95%	
Max. Altitude above sea level without de-rating	upto 1000 mtr	

System Rating (kVA/kW)	105KVA/84kW		120kVA/96kW	150kVA/120kW	200kVA/160kW
SOLAR					
Open circuit voltage	750V				1150V
Maximum PV Power	105kW	120kW	150kW	200kW	
Charge Controller	MPPT Charge Controller				
MPPT Voltage Range	700 - 830	700 - 830	700 - 830	950 - 1120	
Switching Element	IGBT				
Type of Charger	MPPT				
Charger Efficiency	>95%				
GRID					
Input Supply	415 VAC, 3 Phase, 4 wire (+15% , -15%)				
Input Frequency	50Hz ± 6%				
BATTERY					
Battery Voltage	480VDC				
Grid charger type	Bi-Directional				
Charging current from grid	15A for 150Ah battery/20A for 200Ah Battery or, as required by any other battery (up to inverter kVA Capacity)				
Battery Type	Lead Acid/SMF				
INVERTER					
Switching Element	IGBT				
Output wave form	Pure Sine Wave				
Output Nominal Voltage	415VAC ±2%, 3Ph				
Output Fequency	50Hz ±1%				
Load Power Factor	0.6 lag to 1 (within VA and kW rating)				
Inverter Peak Efficiency	90%				
Vth with 100% linear load	Mains mode: Same as Grid inverter mode <3%				
Galvanic isolation	Inbuilt isolation transformation inverter output				
Overload conditions	110% for 60 sec / 125% for 10 sec/150% for 1 sec				
PROTECTION					
Protection	Input Under and Over voltage, Input Under and Over Fequency, Output Overload, Output short circuit, Output over and Under Voltage				
	Over Temperature Array Reverse Polarity, Battery Over and Under voltage				
DISPLAY PARAMETER, LED INDICATION AND ALARM					
Display Parameter	Grid-Voltage Current Power Output voltage, Current total Power, Load Percentage. Battery - voltage, current DC Power Solar-Voltage, Current Power. Statistics - KWH (Grid import, Grid Export, Inverter Battery IN and OUT, Solar) Event log (5 No's/option USB Storage:upto 1000 no's)				
LED Indication	Grid ON/OFF, Grid Static switch ON/OFF, inverter ON/OFF, inverter static Switch ON/OFF, Load ON/OFF, Battery Charging and Discharging				
Alarm	Audible alarm for fault conditions and warnings				
CONFIGURATION					
Modes	2 different priority modes selectable from display (Solar-Battery-Grid) & (Solar-Grid-Battery)				
Parameter Setting	All main Parameters can be set through LCD Display				
Bypass	Manual bypass switch available for maintenance and service				
ENCLOSURE					
Degree of protection	IP 20				
Cooling	Forced Air Cooling				
Color	RAL 5013 Cobalt Blue				
Dimensions (L*W*H)mm	1000 x 1000 x 1700				
Netweight (Approx in Kg's)	710	780	840	910	
ENVIRONMENT					
Temperature Operating	0-40° C				
Max. Relative humidity@25° (non condensing)	Upto 95%				
Max. Altitude above sea level without de-rating	upto 1000 mtr				

System Rating (kVA/kW)	250kVA/200kW
<b>SOLAR</b>	
Open circuit voltage	1150V
Maximum PV Power	250kW
Charge Controller	MPPT Charge Controller
MPPT Voltage Range	950 - 1120
Switching Element	IGBT
Type of Charger	MPPT
Charger Efficiency	>95%
<b>GRID</b>	
Input Supply	415 VAC, 3 Phase, 4 wire (+15% , -15%)
Input Frequency	50Hz ± 6%
<b>BATTERY</b>	
Battery Voltage	672VDC
Grid charger type	Bi-Directional
Charging current from grid	15A for 150Ah battery/20A for 200Ah Battery or, as required by any other battery (up to inverter kVA Capacity)
Battery Type	Lead Acid/SMF
<b>INVERTER</b>	
Switching Element	IGBT
Output wave form	Pure Sine Wave
Output Nominal Voltage	415VAC ±2%, 3Ph
Output Frequency	50Hz ±1%
Load Power Factor	0.6 lag to 1 (within VA and kW rating)
Inverter Peak Efficiency	90%
Vth with 100% linear load	Mains mode: Same as Grid inverter mode <3%
Galvanic isolation	Inbuilt isolation transformation inverter output
Overload conditions	110% for 60 sec / 125% for 10 sec/150% for 1 sec
<b>PROTECTION</b>	
Protection	Input Under and Over voltage, Input Under and Over Frequency, Output Overload, Output short circuit, Output over and Under Voltage
	Over Temperature Array Reverse Polarity, Battery Over and Under voltage
<b>DISPLAY PARAMETER, LED INDICATION AND ALARM</b>	
Display Parameter	Grid-Voltage Current Power Output voltage, Current total Power, Load Percentage. Battery - voltage, current DC Power Solar-Voltage, Current Power. Statistics - KWH (Grid import, Grid Export, Inverter Battery IN and OUT, Solar) Event log (5 No's/option USB Storage: upto 1000 no's)
LED Indication	Grid ON/OFF, Grid Static switch ON/OFF, inverter ON/OFF, inverter static Switch ON/OFF, Load ON/OFF, Battery Charging and Discharging
Alarm	Audible alarm for fault conditions and warnings
<b>CONFIGURATION</b>	
Modes	2 different priority modes selectable from display (Solar-Battery-Grid) & (Solar-Grid-Battery)
Parameter Setting	All main Parameters can be set through LCD Display
Bypass	Manual bypass switch available for maintenance and service
<b>ENCLOSURE</b>	
Degree of protection	IP 20
Cooling	Forced Air Cooling
Color	RAL 5013 Cobalt Blue
Dimensions (L*W*H)mm	1260 x 1104 x 1850
Netweight (Approx in Kg's)	1200
<b>ENVIRONMENT</b>	
Temperature Operating	0-40° C
Max. Relative humidity@25° (non condensing)	Upto 95%
Max. Altitude above sea level without de-rating	upto 1000 mtr

Stock Availability: 8 to 10 weeks from date of Purchase Order

\*Technical specifications are subject to change without prior notice



# Solar Battery

Power of Performance



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



**Very Low Maintenance**



**Long Design Life**



**High Temperature Performance**



**Up to 6 Years Warranty**



**Tubular Technology for longer life**



**Rugged Performance**

## Technical Specifications

Model Name	Nominal Voltage	C10 Capacity	Length ± 3	Width ± 3	Height up to float top ±3	Dry Weight	Filled Weight	Electrolyte Volume ±5%
	V	Ah	mm	mm	mm	Kg	Kg	Litre
ASTT 12150L	12	150	502	191	440	34.5 (±3%)	60 (±3%)	20.6
ASTT 12150H	12	150	502	191	440	34.5 (±3%)	60 (±3%)	20.6
ASTT 12200L	12	200	502	191	440	40.5 (±5%)	67.5 (±5%)	21.8
ASTT 12200H	12	200	502	191	440	46.5 (±5%)	70.5 (±5%)	19.4

Technical specifications are subject to change without prior notice.

\*STC - Standard Test Conditions

# WI-FI DONGLE

Seamless Connectivity



Makes your solar inverter smart with connectivity option, assisting in viewing and tracking solar generation, battery backup, charging time, fault indications, etc.  
(Products Supported: GTIs, PCU PRO)



Real-Time Monitoring



Plug and Play

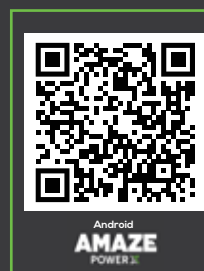


Status Indicators



Convenient Debugging

Scan & Install  
**AMAZE**  
POWER X  
App



## Technical Specifications

Model Name	Sync-X	S3-Wi-Fi-ST	S4-Wi-Fi-ST
<b>ELECTRICAL CHARACTERISTICS</b>			
DC Supply	5V	5V	5V
Current consumption	0.13 Amp	<0.4 Amp	<0.4 Amp
Average power consumption	< 0.65W	≤ 2 W	≤ 2 W
Wi-fi Standard	IEEE 802.11 b/g/n	802.11b/g/n(2.4G)	802.11b/g/n(2.4G)
Bluetooth	Bluetooth 4.2		
<b>INTERFACE</b>			
Physical	4-Pin circular connector	External 4-Pin Port	USB
Data transfer rate	9600bps		
Communication interface	RS 485, Bluetooth	RS485 (internal communication between inverters - upto 10 inverters)	RS485 (internal communication between inverters - upto 10 inverters)
<b>ENVIRONMENTAL</b>			
Operating temperature range	-10 C to + 55C	-30 ~ +65°C	- 30 ~ +65°C
Storage temperature range	-40C to +85C	- 40 ~ +70°C	- 40 ~ +70°C
Relative humidity	0% to 95%	5% - 95%,	5% - 95%,
<b>CIRCULAR CONNECTOR</b>			
Type	4-Pin circular connector	4-Pin circular connector	USB
<b>PROTECTIONS</b>			
Reverse polarity	Yes	Yes	Yes
ESD protection	Yes	Yes	Yes
IP Rating	IP 65	IP 65	IP 65
<b>PHYSICAL</b>			
Net weight (gms)	33.5	85	65
Gross weight (gms)	90.5		
Dimensions with Antenna (L x W x H)mm	142 x 26 x 95 (with recommended right angle antenna direction)	133 x 44 x 44	113 x 50 x 34
<b>CONNECTIVITY</b>			
Compatible with	PCU Pro, GTI	GTI models with 4 pin	GTI models with USB

LED INDICATION	Sync-X
Colour	Indication
LED1 (green)	Power indication
LED 2 (orange)	Wi-fi mode LED
LED 3 (Blue)	Signal strength
LED 4 (White)	Modbus communication

LED INDICATION	S3-Wi-Fi-ST   S4-Wi-Fi-ST		
Colour	Indication		
Internet Indicators (NET) - Green	Shows the connection status between the data logger and the server.	Flashing	Trying to connect with server
		ON	Successfully connected
		OFF	Abnormal connection
Inverter COM Indicators (COM) - Yellow	Shows the connection status between the data logger and the inverter.	Flashing	Trying to connect with inverter
		ON	Successfully connected
		OFF	Abnormal connection
Power Indicator (PWR)- Red	Shows the power supply status of the data logger.	ON	Data logger is powered up normally
		OFF	Data logger is powered up abnormally

# Charge Controller

Easy upgrade to Solar

**AMAZE**  
SOLAR



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



**Protection Against Over-Charge  
and Reverse Current**



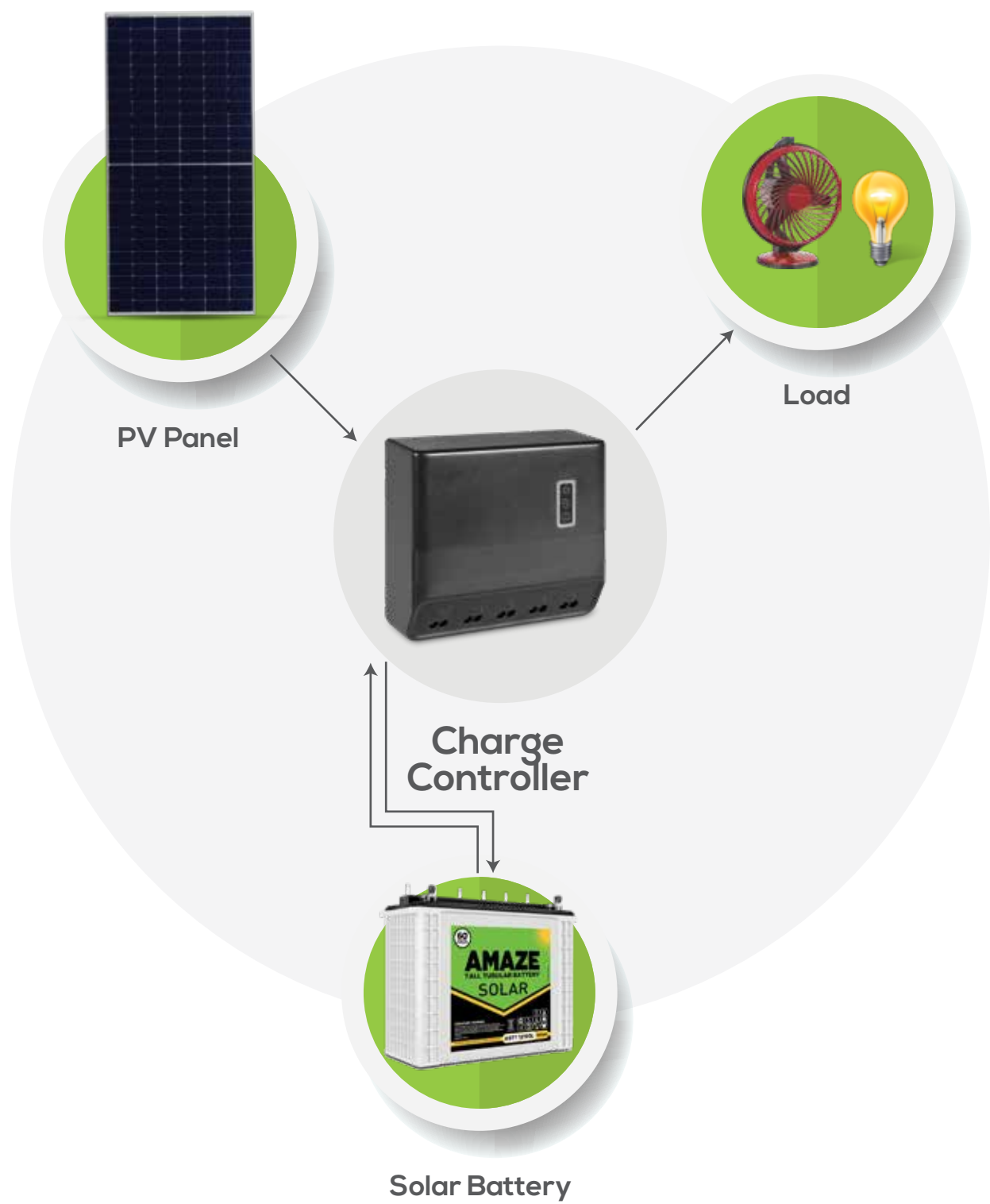
**USB Port**



**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	110Wp x 1 No.s	1 (S)	10
AMS SCC 1210	@12V	170Wp x 1 No.s	1 (S)	20
AMS SCC 1210	@24V	335Wp x 1 No.s	1 (S)	40
AMS SCC 1220	@12V	170Wp x 2 No.s	2 (P)	40
AMS SCC 1220	@24V	335Wp x 2 No.s	2 (P)	80



## Technical Specifications

Model Name	AMS SCC1206	AMS SCC1210	AMS SCC1220
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.



# COMING SOON



# AMS PRO series

With Proven MPPT Technology

**AMAZE**  
SOLAR



AMS PRO is an intelligent solar inverter which comes with in-built MPPT technology helping in converting 30% more power from solar panels as compared to PWM charge controllers.



**3 User Settable Saving Modes**



**Max Capacity Utilization**



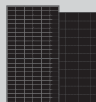
**Powerful Charging on Low Voltage**



**Informative LCD Display**



**3 Years Warranty**



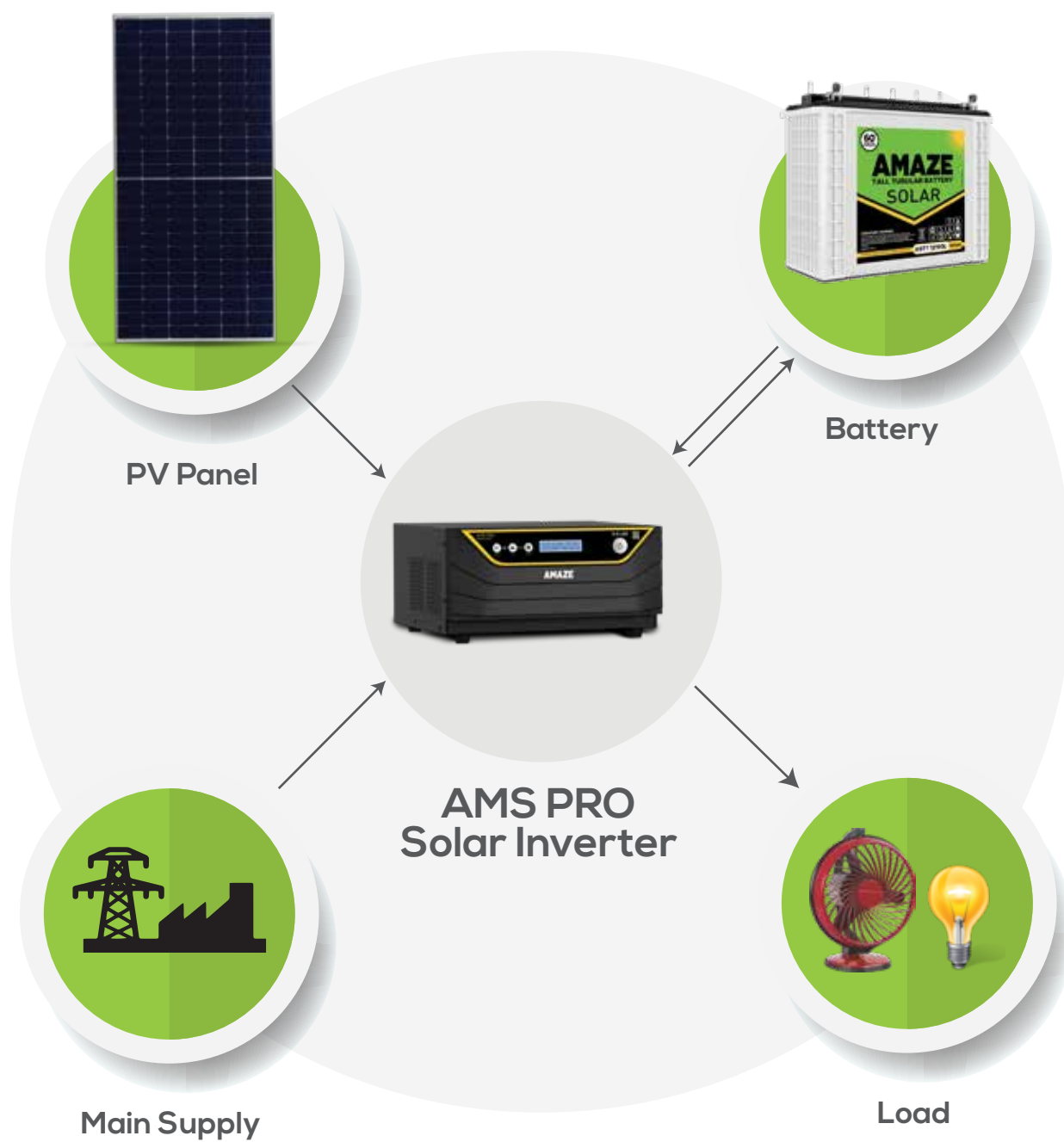
**Compatible with both 12V & 24V Solar Panels**



**Max Capacity Utilization**

## Solar Estimation Chart

Solution			Panel Connection Combination (Series-Parallel)	Approx. Roof Top Area Required (Sq. ft.)
Solar Inverter	Solar Battery	PV Panel Watt		
AMS PRO 1KVA/12V	150Ah x 1	585Wp x 2 Nos	2 (P)	26.6
AMS PRO 1KVA/24V	150Ah x 2	585Wp x 2 Nos	2 (P)	26.6



## Technical Specifications

Model Name	AMS PRO 1KVA/12V	AMS PRO 1KVA/24V
Nominal Battery Voltage (Vdc)	12V	24V
Capacity (kVA)	1 kVA	
Output Waveform	Pure Sine Wave	
SOLAR PHOTOVOLTAIC INPUT		
Charge Controller Type	MPPT	
Maximum PV power	1000Wp	
Input Voltage range (Voc)	35V-55V	
GRID INPUT		
Operating Voltage Range	90V-290V	
GRID OUTPUT		
No Load Output	230V +/- 10V	
Output frequency battery mode	50 Hz +/- 0.5Hz	
Inverter Efficiency	>80%	
USER SELECTABLE FROM FRONT SWITCH		
Mode Selections	Solar/Solar+Grid/Grid+Solar	
Battery Type Selections	Tubular/SMF/Flat	
No Load Shutdown	Enable/Disable	
MAINS CHARGING CURRENT		
Solar Mode	0A*	
Solar + Grid Mode	15A±2A	
Grid + Solar Mode	20A±2A	
BATTERY		
No. of Batteries	1	2
Battery Charging Current from Solar	30A±2A	
Battery Charging Current from Grid	0A/15A/20A	
Type of Battery Supported	Tubular/SMF/Flat	
PROTECTIONS		
Overload	>102%	
Protections	Short circuit, Overload, Over temperature, Low Battery, No Load Shutdown	
Alarms	Battery low pre-alarm, Battery low, Short-circuit, Overload, Faults	
LCD DISPLAY		
LCD Display Messages	Mains Available, Power Saving, Solar Current,Solar Voltage, Solar Power, System On, Grid Charging, Low Battery, Overload, No Load Shutdown	
ENVIRONMENT		
Ambient operating temperature	0-45°C	
Storage Temperature	0-50°C	
Humidity	Upto 95%(Non-Condensed)	
Cooling system	Forced Cooling	
STANDARD COMPLIANCE		
Certifications	BIS certified as per IS/IEC standards	
GENERAL		
Net weight (Kg)	14.1 kg	
Gross weight (Kg)	15.5 kg	
Dimensions LxWxH (mm)	356 X 320 X 138 mm	

Technical specifications are subject to change without prior notice.

## NOTES



Contact us: Plot no.94, Sector-5, Pocket N1, Bawana, Delhi 110039

Customer Care:  
99999 33039

Website:  
[www.amaze-india.com](http://www.amaze-india.com)

Mail ID:  
[Care@Amaze-india.com](mailto:Care@Amaze-india.com)

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