sunorasolar.com

SUNORA SOLAR

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TOPCon Solar Panel
SUN144TXXX(XXX=Wp)(575 to 600 Wp) 3

Mono Perc Solar Panel
(520 to 550 Wp) 4

Single phase solar inverter
SUN-GTI (2.3 to 4.4 kW) 5

Single phase solar inverter
SUN-GTI (4.6 to 6 kW) 6

Three phase solar inverter
SUN-GTI (4 to 15 kW) 7

Three phase solar inverter
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About Us

Sunora Solar, the flagship company of Unique Sun Power Pvt. Ltd., was founded in 2016 and is head quartered in Surat, Gujarat, India. The company specializes in the manufacturing of high performance solar photovoltaic (PV) modules and inverters for solutions in residential, commercial, and industrial sectors.

With a strong commitment to innovation, sustainability, and cutting-edge technology, Sunora Solar has positioned itself as a trusted name in the renewable energy sector. The company is dedicated to providing cost -effective and efficient solar solutions to accelerate the global transition toward clean energy.

We are launching 3 GW module manufacturing & 1 GW cell manufacturing line soon.

Product Portfolio

Sunora Solar offers a wide range of solar PV modules and inverters designed for maximum efficiency, durability, and performance These product cater to diverse energy needs across various sectors, ensuring reliable and sustainable energy solutions.

Founders & Leadership

Sunora Solar was founded by Mr. Piyush Variya, Mr. Mayur Vastarpara, and Mr. Ridham Patel, who bring extensive expertise in renewable energy, engineering, and business management. Their leadership has been instrumental in driving the company's growth, fostering innovation, and maintaining a strong commitment to sustainability and quality.

Mr. Piyush Variya

Mr. Ridham Patel

Mr. Mayur Vastarpara

Our Core Values & Vision

The Core Value of our organization is the values that drive our work to achieve our vision for the betterment of our planet. Our core values are as follow:

Integrity – Ensuring transparency, ethics, and honesty in all dealings.
Excellence – Striving for superior quality and high-performance products.
Responsibility – Commitment to environmental sustainability and renewable energy adoption.
Unity – Fostering collaboration and teamwork for collective growth.
Learning – Encouraging innovation and technological advancement in solar energy.

Our Vision :

We foresee a world powered by renewable energy, with a global presence of high-quality, sustainable energy.

Our Mission :

By virtue of our commitment to society, we strive to bestow top-quality solar solutions with extraordinary services and the utmost professional integrity to ameliorate the condition of our environment.

WHY CHOOSE US ?

- Proven Expertise
- Customer-Centric Approach
- Quality Assurance
- Competitive Value

Commitment to Quality & Sustainability

Sunora Solar places immense emphasis on product quality, reliability, & sustainability. The company follows stringent quality control measures, ensuring that every solar module meets international standards & certifications for performance and durability.

- Sunora Solar also remains committed to:
  - Reducing carbon emissions through the widespread adoption of clean energy solutions.
  - Enhancing energy efficiency through continuous research and development (R&D).
  - Delivering customer-centric solutions with high performance and long-term reliability.

ELITE PRO+NTYPE

SUNORA SOLAR

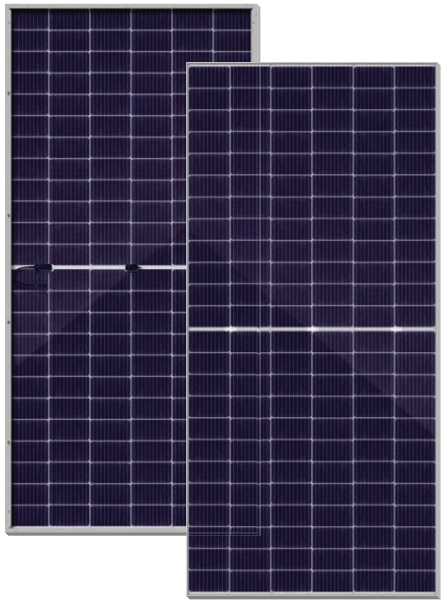
SUN144TXXX(XXX=570-600Wp)

N-TOPCon
Bifacial Monocrystalline Module

2279x1134x35/30
Dimensions (mm)

144 CELL — Mono TOPCon
570-600Wp — Power output

1500 VDC — Max. system voltage
22.83% — Max. efficiency



KEY FEATURES

Higher Power Output
Module power increases by 5-25% generally, bringing significantly lower LCOE and higher IRR. 0-5w positive tolerance output warranty.

Optimal Choice for Ultra-large Power Plants
Contribute to Lower BOS cost and LCOE.

ZERO LID
N-Type cell is characterized by "0" LID, which generates more power.

PID Resistance
Excellent Anti-PID performance guarantee via optimized mass-production process and material control.

Durability Against Extreme Environmental Conditions
High salt mist and ammonia resistance certified by TUV NORD. Lower temperature coecient and operating temperature.

More Outstanding Low-light Performance
Higher power output even under low-light environments like on cloudy days

Enhanced Mechanical Load
Certified to withstand: wind load (2400 Pa) and snow load (5400 Pa).

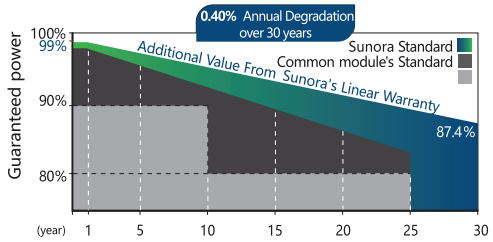
EL Full Inspection
Dual-stage 100% EL Inspection.

Comprehensive Products and System Certificates

IEC61215/IEC61730/IEC61701/IS14286/IEC61853-1/IEC62804-1
ISO 9001: Quality Management System
ISO 14001: Environmental Management System
ISO 27001: Information Security Management System
GMP-Good Manufacturing Practices
ISO 14064: Greenhouse Gases Emissions Verification
OHSAS 18001: Occupational Health and Safety Management System

LINEAR PERFORMANCE WARRANTY

12-year product warranty / 30-year linear power warrant

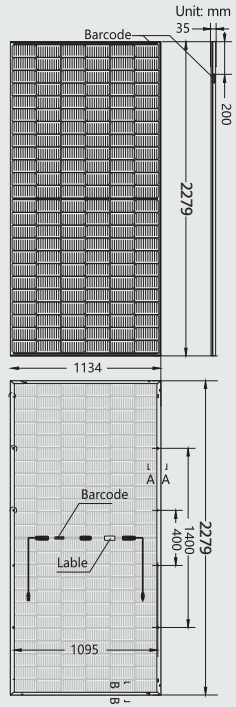


ELITE PRO+NTYPE

SUN144TXXX(XXX=Wp) (570Wp-600Wp)

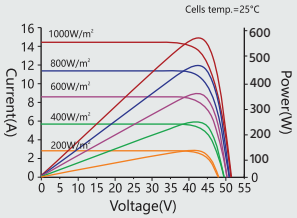
N-TOPCon | Bifacial Monocrystalline Module

Dimensions of PV Module

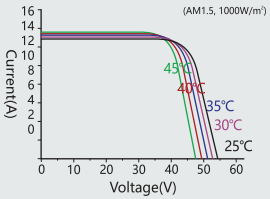


SUN144TXXX(XXX=Wp) (570Wp-600Wp)

I-V characteristics at different irradiations



I-V characteristics at different temperatures



MAKE IN INDIA

ELECTRICAL CHARACTERISTICS (STC*)

Rated Power in Watts-Pmax(Wp)	SUN144T570	SUN144T575	SUN144T580	SUN144T585	SUN144T590	SUN144T600
Open Circuit Voltage-Voc(V)	51.07	51.27	51.47	51.67	51.87	52.27
Short Circuit Current-Isc(A)	14.25	14.31	14.37	14.43	14.49	14.61
Max. Power Voltage-Vmpp(V)	42.29	42.44	42.59	42.74	42.89	43.19
Max. Power Current-Impp(A)	13.48	13.55	13.62	13.69	13.76	13.90
Module Efficiency(%)	22.06	22.25	22.44	22.64	22.83	23.26
Maximum system voltage	1500 vdc					
Fuse Rating(A)	30					
Temperature coefficient Pmax	-0.3561%/ C					
Temperature coefficient Isc	0.0547%/ C					
Temperature coefficient Voc	-0.2853%/ C					
Refer. Bifacial Factor	80±5%					

*STC: Irradiance 1000W/m², module temperature 25°C, AM=1.5

WORKING CHARACTERISTICS (NOCT*)

Rated Power in Watts-Pmax(Wp)	428	431	435	439	443	452
Open Circuit Voltage-Voc(V)	48.52	48.71	48.90	49.09	49.28	49.65
Short Circuit Current-Isc(A)	11.40	11.45	11.50	11.54	11.59	11.80
Max. Power Voltage-Vmpp(V)	39.33	39.47	39.61	39.75	39.89	40.30
Max. Power Current-Impp(A)	10.78	10.84	10.90	10.95	11.01	11.18
Power tolerance	0~+3%					
NOCT	45°C±2°C					
Operating Temperature	-40°C~85°C					

*NOCT: Irradiance 800W/m², ambient temperature 20°C, wind speed 1m/s

Electrical characteristics with different rear side power gain

5%	Pmax(Wp)	599	604	609	614	620	632
	Efficiency(%)	22.75	22.55	22.35	22.14	21.94	24.37
15%	Pmax(Wp)	656	661	667	673	679	691
	Efficiency(%)	24.92	24.70	24.47	24.25	24.03	24.37
25%	Pmax(Wp)	713	719	725	731	738	752
	Efficiency(%)	27.09	26.84	26.60	26.36	26.12	29.02

The additional gain from the rear side compared to the power of the front side at the standard test condition.
It depends on mounting (structure, height, tilt angle etc.) and albedo of the ground.

MECHANICAL CHARACTERISTICS

Number of cells	144pcs	Type of frame	Anodized Aluminum Alloy
Size of cell(mm)	182×91	Size of module(mm)	2279×1134×35
Type of cell	N-TOPCon Mono	Weight(kg)	32.8/34.50
Thickness of glass(mm)	2.2	Cables/connectors	4.0mm², MC4 compatible
Junction box	IP68	Length of Cabel	+300mm/-300mm(connector included)

PACKAGING CONFIGURATION

Height of Modules (mm)	35	30
Number of Modules Per Pallet	31	36
Packaging Box Dimensions (l×w×h) (mm)	2300×1120×1260	2300×1120×1260
Box Gross Weight (kg)	1084	1210
Number of Modules Per 40ft (HQ) Container	620	720
Number of Pallets Per 40ft (HQ) Container	20	20

PRODUCT BY
UNIQUE SUN POWER
Reclaim Your Energy

SUNORA SOLAR

ELITE PRO+NTYPE

SUN132P (610Wp-640Wp)

N-TOPCon
Bifacial Glass To Glass Module

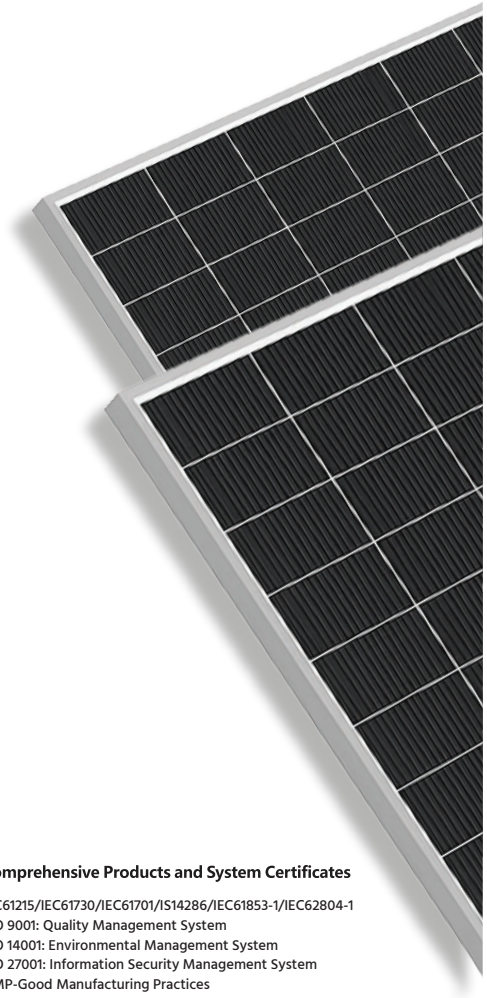
2384x1134x30
Dimensions (mm)

132CELL — Mono TOPCon

610Wp-640Wp — Power output

1500 VDC — Max. system voltage

23.80% — Max. efficiency



KEY FEATURES

Higher Power Output
Module power increases by 5-25% generally, bringing significantly lower LCOE and higher IRR. 0-5w positive tolerance output warranty.

Optimal Choice for Ultra-large Power Plants
Contribute to Lower BOS cost and LCOE.

ZERO LID
N-Type cell is characterized by "0" LID, which generates more power.

PID Resistance
Excellent Anti-PID performance guarantee via optimized mass-production process and material control.

Durability Against Extreme Environmental Conditions
High salt mist and ammonia resistance certified by TUV NORD. Lower temperature coecient and operating temperature.

More Outstanding Low-light Performance
Higher power output even under low-light environments like on cloudy days

Enhanced Mechanical Load
Certified to withstand: wind load (2400 Pa) and snow load (5400 Pa).

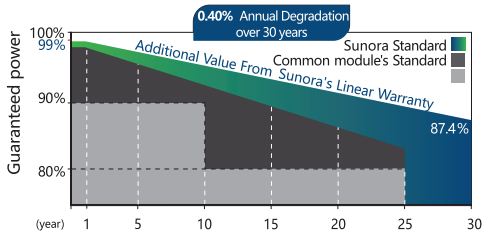
EL Full Inspection
Dual-stage 100% EL Inspection.

Comprehensive Products and System Certificates

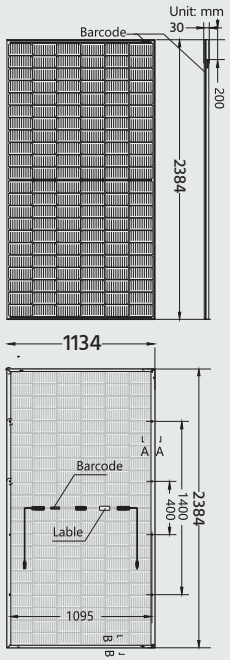
IEC61215/IEC61730/IEC61701/IS14286/IEC61853-1/IEC62804-1
ISO 9001: Quality Management System
ISO 14001: Environmental Management System
ISO 27001: Information Security Management System
GMP-Good Manufacturing Practices
ISO 14064: Greenhouse Gases Emissions Verification
OHSAS 18001: Occupational Health and Safety Management System
*Under Process

LINEAR PERFORMANCE WARRANTY

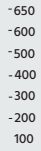
12-year product warranty / 30-year linear power warrant



Dimensions of PV Module

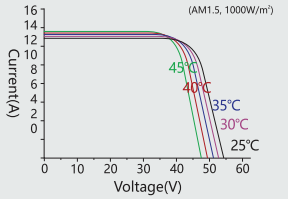


SUN132P (610Wp-640Wp)
I-V characteristics at different irradiations



Voltage(V)

I-V characteristics at different temperatures



MAKE IN INDIA

ELECTRICAL CHARACTERISTICS (STC*)

Rated Power in Watts-Pmax(Wp)	SUN132P610	SUN132P615	SUN132P620	SUN132P625	SUN132P630	SUN132P635	SUN132P640
Open Circuit Voltage-Voc(V)	49.00	49.30	49.60	49.90	50.20	50.50	50.80
Short Circuit Current-Isc(A)	15.86	15.90	15.94	15.98	16.02	16.06	16.10
Max. Power Voltage-Vmpp(V)	40.80	41.00	41.20	41.40	41.60	41.80	42.00
Max. Power Current-Impp(A)	14.96	15.00	15.05	15.15	15.20	15.25	15.30
Module Efficiency(%)	22.60	22.80	23.00	23.20	23.40	23.60	23.80
Maximum system voltage	1500 vdc						
Fuse Rating(A)	35A						
Temperature coefficient Pmax	-0.29%/℃						
Temperature coefficient Isc	+0.043%/℃						
Temperature coefficient Voc	-0.24%/℃						
Refer. Bifacial Factor	80%±5%						

*STC: Irradiance 1000W/m², module temperature 25℃, AM=1.5

WORKING CHARACTERISTICS (NOCT*)

Rated Power in Watts-Pmax(Wp)	466	470	473	476	479	482	485
Open Circuit Voltage-Voc(V)	46.50	46.80	47.10	47.40	47.70	48.00	48.30
Short Circuit Current-Isc(A)	12.78	12.81	12.84	12.87	12.90	12.93	12.96
Max. Power Voltage-Vmpp(V)	38.30	38.50	38.70	38.90	39.10	39.30	39.50
Max. Power Current-Impp(A)	12.16	12.21	12.23	12.24	12.26	12.28	12.30
Power tolerance	0~+3%						
NOCT	43℃±2℃						
Operating Temperature	-40℃~85℃						

*NOCT: Irradiance 800W/m², ambient temperature 20℃, wind speed 1m/s

Electrical characteristics with different rear side power gain

Pmax gain	10%	15%	20%	25%	30%	35%	40%
Pmax /W	677	707	732	763	793	823	853
Vmpp /V	41.00	41.00	41.00	41.00	41.00	41.00	41.00
Impp /A	16.50	17.25	18.00	18.75	19.50	20.25	21.00
Voc /V	49.30	49.30	49.30	49.30	49.30	49.30	49.30
Isc /a	17.49	18.29	19.08	19.88	20.68	21.48	22.28

The additional gain from the rear side compared to the power of the front side at the standard test condition.
It depends on mounting (structure, height, tilt angle etc.) and albedo of the ground.

MECHANICAL CHARACTERISTICS

Number of cells	132pcs	Type of frame	Anodized Aluminum Alloy
Size of cell(mm)	182×91	Size of module(mm)	2384x1134x30
Type of cell	N-TOPCon Mono	Weight(kg)	33.07
Thickness of glass(mm)	2.2/2.0	Cables/connectors	4.0mm², MC4 compatible
Junction box	IP68	Length of Cabel	+300mm/-300mm(connector included)

PACKAGING CONFIGURATION

Height of Modules (mm)	35	30
Number of Modules Per Pallet	31	36
Packaging Box Dimensions (l×w×h) (mm)	2300×1120×1260	2300×1120×1260
Box Gross Weight (kg)	1084	1210
Number of Modules Per 40ft (HQ) Container	620	720
Number of Pallets Per 40ft (HQ) Container	20	20

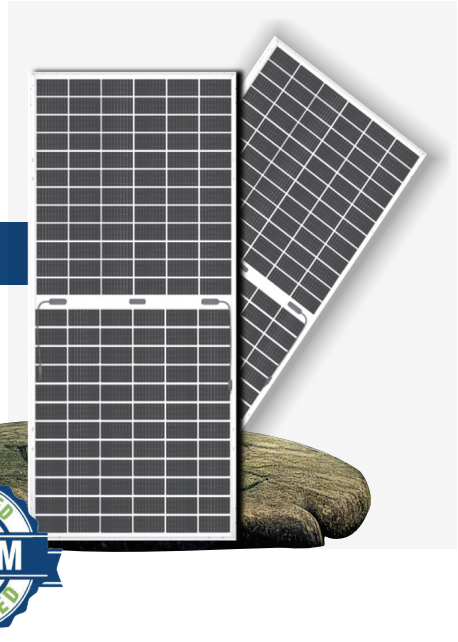
PRODUCT BY
UNIQUE SUN POWER
Reclaim Your Energy

SUNORA® SOLAR

BI-FACIAL
MONO PERC
HC MODULE

ELITE PRO+

SUN144PXXX(XXX=520-550Wp)



12 YEAR — **WARRANTY FOR MATERIALS AND PROCESSING**

30 YEAR — **WARRANTY FOR LINEAR POWER OUTPUT**

APPROVED ALMM APPROVED

INDUSTRY LEADING PROTECTION

EXCELLENT EFFICIENCY
Excellent module conversion
efficiency of up to 21.03%

LOW-LIGHT PERFORMANCE
Advanced glass and cell surface textured design
ensure excellent performance in low-light environment

HIGH SAVING
Lower LCOE, reduced BOS cost,
shorter payback time

PID RESISTANCE
Excellent Anti-PID Performance gurantee
limited power degradation for mass production

MINIMUM MICRO-CRACK INPUT

POWER GAIN BENEFIT
Up to 30% power gain

BI-FACIAL MODULE

ELITE PRO+ **520-550**

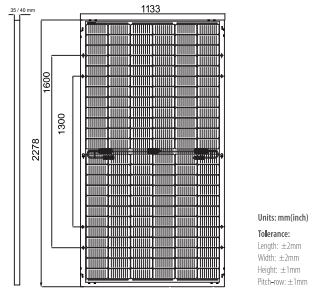
MECHANICAL SPECIFICATION

Solar cells	144 monocrystalline Silicon(PERC), Multi BB
Encapsulation	Ultra - clear PID free EVA (Ethylene-Vinyl-Acetate)
Backside	Backsheet
Frame	Silver Anodized Aluminium Alloy
Front Glass	3.2mm, High Transmission, AR Coated Tempered Glass
Dimensions	(L) 2278 mm x (W) 1133 mm x (H) 35mm
Weight	~28 Kg
J-box	IP 68 certified, 3 diodes, Split junction box
Series Fuse Rating	25 A
Cable	Solar cable 400 mm length
Connectors	MC4 compatible connectors
Application Class	Class A
Electrical Safety	Class ||
Fire Safety	Class C (Type 1)
	Snow load 5400 Pa, Wind load 2400 pa

OPERATING PARAMETERS

- Operational Temperature: -40℃ ~ +85℃
- Power Output Tolerance: 0 ~ +5 W
- Voc and Isc Tolerance: ±3%
- Maximum System Voltage: DC1500V (IEC/UL)
- Maximum Series Fuse Rating: 25A
- Nominal Operating Cell Temperature: 45±2℃
- Safety Protection Class: Class \|\|
- Fire Rating: UL type 3

DESIGN (MM)



ELECTRICAL CHARACTERISTICS

TEST UNCERTANITY FOR PMAX: ± 3%

Model Number	SUN144PXXX(XXX=520-550Wp)						
Maximum Power (Pmax/W)	520	525	530	535	540	545	550
Open Circuit Voltage (Voc/V)	49.10	49.20	49.30	49.42	49.51	49.61	49.70
Short Circuit Current (Isc/A)	13.32	13.40	13.50	13.56	13.63	13.73	13.82
Voltage at Maximum Power (Vmp/V)	41.30	41.40	41.48	41.56	41.65	41.77	41.88
Current at Maximum Power (Imp/A)	12.60	12.69	12.78	12.88	12.97	13.05	13.14
Module Efficiency (%)	20.18	20.37	20.56	20.76	20.95	21.14	21.34

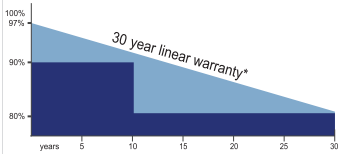
ELECTRICAL CHARACTERISTICS WITH DIFFRENT POWER GAIN

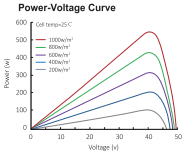
5% Power Gain	Total power - Pmax(Wp)	546	551	557	562	567	572	578
	Module efficiency (%)	22.38	22.18	21.98	21.78	21.57	21.37	21.16
15% Power Gain	Total power - Pmax(Wp)	598	604	610	615	621	627	633
	Module efficiency (%)	24.51	24.29	24.07	23.85	23.62	23.40	23.17
25% Power Gain	Total power - Pmax(Wp)	650	656	663	669	675	681	688
	Module efficiency (%)	26.64	26.40	26.16	25.93	25.68	25.44	25.19

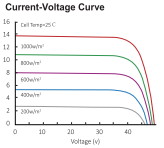
STC (Standard Testing Conditions): Irradiance 1000W/m²Cell Temperature 25℃, Spectra at AM1.5

NOCT (Nominal Operating Cell Temperature): Irradiance 800W/m², Ambient Temperature 20℃, Spectra at AM1.5, Wind at 1m/S

TEMPERATURE RATINGS (STC)		MECHANICAL LOADING	
Temperature Coefficient of Isc	+0.022%/C	Front Side Static Loading	5400Pa
Temperature Coefficient of Voc	-0.172%/C	Rear Side Maximum Static Loading	2400Pa
Temperature Coefficient of Pmax	-0.316%/C	Hailstone Test	25mm Hailstone at the speed of 23m/s







Comprehensive Products and System Certificates

IEC61215/IEC61730/IEC61701/IS14286/IEC61853-1/IEC62804-1
ISO 9001: Quality Management System
ISO 14001: Environmental Management System
ISO 27001: Information Security Management System
GMP-Good Manufacturing Practices
ISO 14064: Greenhouse Gases Emissions Verification
OHSAS 18001: Occupational Health and Safety Management System

PRODUCT BY

UNIQUE SUN POWER TM Reclaim Your Energy

MAKE IN INDIA

Office :
OFFICE NO. 365,366, LAXMI ENCLAVE-2, OPP. GAJERA SCHOOL, KATARGAM, SURAT, GUJARAT - 395004.

Factory :
BL No. 2281/2/1/1, Sub Plot. 1-A, Near Areth Minnor Canal, Village - Tadkeshwar, Ta - Mandvi, Surat, Gujarat, 394170

info@sunorasolar.com | Toll Free Number 1800 889 8098 | www.sunorasolar.com | /sunorasolar

Single Phase Solar GTI

2.3 kW/3 kW/3.4 kW/3.6 kW/4 kW/4.4 kW

- Power-Export limitation function
- LCD Display
- Wi-fi/GPRS/Lan Communication Optional
- IP66 design & quick & easy to install

SOLAR GRID TIED INVERTER

Technology Data

Model No.	SUN2300G4	SUN3000G4	SUN3400G4	SUN3600G4	SUN4000G4	SUN4400G4
Input Data (DC)						
Max DC power (W)	2875	3750	4250	4500	5000	5500
Max Allowable DC voltage (Vdc)/ Max DC voltage (Vdc)	275/550	320/550	320/550	320/550	385/550	450/550
Min System start/Shut down voltage (Vdc)	50/100	75/100	50/100	50/100	50/100	50/100
Max. input current (A)	18					
Number of MPP trackers/Total Nos. of Strings	1/1					
Input Terminal type	MC4					
Output Data (AC)						
Rated Output Power (W)	2300	3000	3400	3600	4000	4400
Maximum Output Power (VA)	2300	3000	3400	3600	4000	4400
Nominal Output Voltage/Range (V)	L/N/PE 240/180-310Vac					
AC Grid Frequency/Range (Hz)	50Hz/45Hz-55Hz					
Maximum Output Current (A)	9.5	12.5	14.2	16	16.8	18.3
AC Connection (With PE)	Single Phase					
Current Distortion (THDI)	<1.5%					
Power Facto	>0.99(Adjustable from 0.8 leading to 0.8 logging)					
Efficiency						
Maximum Conversion Efficiency	97.3%	97.3%	97.4%	97.5%	97.8%	97.8%
European Efficiency	97%	97.1%	97.2%	97.2%	97.3%	97.3%
MPPT Efficiency	99.9%					
Safety						
DC Reverse-Polarity Protection	Yes					
Anti-Islanding/Overvoltage Protection	Yes					
Short Circuit Protection	Yes					
Leakage Current Protection	Yes					
Grid Monitoring/Ground Fault Monitoring	Yes					
DC/AC Side SPD(Thermally Protected)	Yes					
General Data						
Dimension (L/W/H)(Mm)	340/270/127					
Weight (Kg)	7 kg					
Embedded DC Switch	Optional					
Night Power Consumption (W)	<0.2					
Isolation Type	Transformerless					
Protection Degree	IP66 according to IEC60529					
Operation Temperature (°C)	-25~+60 C					
Cooling Concept	Natural Convection Fan Cooling (12000 RPM)					
Operating Altitude (M)	<2000m without power derating					
Acoustic Noise Level (DB)	35 db					
Display	Graphic LCD					
Communication Interface	Standard WIFI, RS485 (optional)					
Warranty	10 Years 25 years for optional					

Single Phase Solar GTI

4.6kW/4.8kW/5kW/5.3kW/5.5kW/6kW

- Power-Export limitation function
- LCD Display
- Wi-fi/GPRS/Lan Communication Optional
- IP66 design & quick & easy to install

SOLAR GRID TIED INVERTER

Technology Data

Model No.	SUN4600G4	SUN4800G4	SUN5000G4	SUN5300G4	SUN5500G4	SUN6000G4
Input Data (DC)						
Max DC power (W)	5750	6000	6250	6625	6875	7500
Max Allowable DC voltage (Vdc)/ Max DC voltage (Vdc)	550/550					
Min System start/Shut down voltage (Vdc)	50/100					
Max. input current (A)	22					
Number of MPP trackers/Total Nos. of Strings	1/1					
Input Terminal type	MC4					
Output Data (AC)						
Rated Output Power (W)	4600	4800	5000	5300	5500	6000
Maximum Output Power (VA)	4600	4800	5000	5300	5500	6000
Nominal Output Voltage/Range (V)	L/N/PE 240/180-310Vac					
AC Grid Frequency/Range (Hz)	50Hz/45Hz-55Hz					
Maximum Output Current (A)	19.1	20	20.8	22	23	25
AC Connection (With PE)	Single Phase					
Current Distortion (THDI)	<1.5%					
Power Facto	>0.99(Adjustable from 0.8 leading to 0.8 logging)					
Efficiency						
Maximum Conversion Efficiency	97.8%	97.5%	97.5%	97.5%	97.6%	97.6%
European Efficiency	97.3%	97.3%	97.2%	97.2%	97.3%	97.3%
MPPT Efficiency	99.9%					
Safety						
DC Reverse-Polarity Protection	Yes					
Anti-Islanding/Overvoltage Protection	Yes					
Short Circuit Protection	Yes					
Leakage Current Protection	Yes					
Grid Monitoring/Ground Fault Monitoring	Yes					
DC/AC Side SPD(Thermally Protected)	Yes					
General Data						
Dimension (L/W/H)(Mm)	340/270/127					
Weight (Kg)	8 kg					
Embedded DC Switch	Optional					
Night Power Consumption (W)	<0.2					
Isolation Type	Transformerless					
Protection Degree	IP66 according to IEC60529					
Operation Temperature (°C)	-25~+60					
Cooling Concept	Natural Convection Fan Cooling (12000 RPM)					
Operating Altitude (M)	<2000m without power derating					
Acoustic Noise Level (DB)	35 db					
Display	Graphic LCD					
Communication Interface	Standard WIFI, RS485 (optional)					
Warranty	10 Years 25 years for optional					

Three Phase Solar GTI

3 kW/4 kW/5 kW/6 kW/8 kW/10 kW/12 kW/15 kW

- Max. efficiency up to 99.9%
- Compact design, lightweight
- Two MPPTs with 150% DC overload
- RS485/Bluetooth, optional: Wi-Fi/Ethernet
- Feed-in limitation function
- Natural cooling, with fans-low noise

SOLAR GRID TIED INVERTER

Technology Data

Model No.	SUN03G5	SUN04G5	SUN05G5	SUN06G5	SUN07G5	SUN08G5	SUN09G5	SUN10G5	SUN12G5	SUN15G5
Input Data (DC)										
Max. recommended PV power(for module STC)	4.5kW	6kW	7.5kW	9kW	10.5kW	12kW	13.5kW	15kW	18kW	22.5kW
Max. DC Voltage	1100V									
Star-up Voltage	180V									
Nominal Voltage	600V									
MPPT Voltage Range	140-1000V									
No. of MPP Trackers	2									
No. of PV Strings Per MPP Tracker	1/1						1/2			
Max, input current per MPPT tracker	16A/16A						16A/32A			
Output Data (AC)										
AC Nominal Powerput Power	3kW	4kW	5kW	6kW	7kW	8kW	9kW	10kW	12kW	15kW
Max. AC Apparent Power	3.3kVA	4.4kVA	5.5kVA	6.6kVA	7.7kVA	8.8kVA	9.9kVA	11kVA	13.2kVA	16.5kVA
Nominal AC Voltage (range*)	230V/400V (340-440V)									
AC Grid Frequency (range*)	50/60 Hz (45-55Hz/55-65Hz)									
Max. Output Current (PF-09)	4.8A	6.4A	8.0A	9.6A	11.2A	12.8A	14.3A	15.9A	19.1A	23.9A
Adjustable Power Factor	0.8 leading...0.8 lagging									
THDI	<3%									
AC Grid Connection Type	3L/N/PE or 3L/PE									
Efficiency										
Max. Efficiency	98.40%			98.50%			98.60%			
European Efficiency	97.50%			98.00%			98.10%			
MPPT Efficiency	99.90%			99.90%			99.90%			
Protection Devices										
Anti Reverse Power Function	Optional									
DC Reverse Polarity Protection	Yes									
DC Switch	Yes									
AC/DC Surge Protection	Type II									
Insulation Resistance Monitoring	Yes									
AC Short-circuit Protection	Yes									
Grid Monitoring	Yes									
Anti-islanding Protection	Yes									
Residual-current Monitoring Unit	Yes									
String Fault Monitoring Unit	/									
AFCI Protection	Optional									
General Parameters										
Noise	≤35 dB									≤50 dB
Dimensions (WxHxD)	440 x 370 x 140 mm									
Weight	13 kg									
Operating Temperature Range	-25°C~+60°C (>45°C Derating)									
Relative Humidity	0~100%									
Altitude	4000m (2000m Derating)									
Self-consumption of Night	<1w									
Topology	Transformerless									
Cooling	Natural Cooling									
Protection Degree	IP66									
DC Connection	H4/MC4 (Optional)									
AC Connection	Connector									
Warranty	10 Years									
Display	LED/Touch									
Communication	Host: RS485 USB Optional: 4G/Wi-Fi									

Three Phase Solar GTI

18kW/20kW/25kW

- Max. efficiency up to 99.9%
- Compact design, lightweight
- Two MPPTs with 150% DC overload
- RS485/Bluetooth, optional: Wi-Fi/Ethernet
- Feed-in limitation function
- Natural cooling, with fans-low noise

SOLAR GRID TIED INVERTER

Technology Data

Model No.	SUN18G4	SUN20G4	SUN25G4
Input Data (DC)			
Max Input Power	25.5kW	30kW	37.5kW
Max. DC Voltage		1100V	
Star-up Voltage		180V	
Nominal Voltage		600V	
MPPT Voltage Range		160-1000V2	
No. of MPP Trackers		2	
No. of PV Strings Per MPP Tracker		32A	
Max, input current per MPPT tracker			
Max Input Short-circuit Current per MPPT		40A	
Output Data (AC)			
Nominal Output Power	17kW	20kW	25kW
Max. AC Apparent Power	18.7kVA	22kVA	27.5kVA
Nominal AC Voltage		230/400V, 3L/N/PE or 3L/PE	
AC Grid Frequency		50/60 Hz	
Frequency Range		(45-55)/(55-65)Hz	
Max. Output Current (PF=0.9)	28.4A	33.4A	41.8A
Power Factor		0.99>	
Adjustable Power Factor Range		0.8 leading...0.8 lagging	
Max. Total Harmonic Distortion		<3%(Rated Power)	
Efficiency			
Max. Efficiency		98.5%	
European Efficiency		98.0%	
MPPT Efficiency		99.99%	
Protection Devices			
Anti-flow Protection		Yes	
DC Reverse Polarity Protection		Yes	
DC Switch		Yes Type	
DC Surge Protection		II Yes	
Insulation Resistance Monitoring		Yes	
Residual-current Monitoring Unit(GFCI)		Yes Type	
AC Short-circuit Protection		II Yes	
AC Surge Protection		Yes	
Grid Monitoring			
Anti-islanding Protection			
Anti-PID Function		Yes	
AFCI Protection		Optional	
General Parameters			
Dimensions (WxHxD)		520 x 420 x 242 mm	
Weight		27 kg	
Operating Temperature Range		-25°C~+60°C (>45°C Derating)	
Relative Humidity		0~100%	
Altitude		4000m (>2000m Derating)	
Self-consumption of Night		<1w	
Topology		Transformerless	
Cooling		Intelligent Air Cooling	
Protection Degree		IP66	
Warranty		5 Years/10 Years Optional	
Display		LED & LCD	
Communication		Yes: RS485/USB, Optional 4G/Wi-fi	

CP30HL – CP60HL

CP SOLAR INVERTER

High Yield & Efficiency

- Low start-up voltage and wide MPPT voltage for more power generation time.
- Anti Potential Induced Degradation (PID) integrated function reducing the negative effect of PID.
- SiC power components to increase power generation.
- 150% PV array oversizing, 110% AC output overloading, 16 A input current per string to compatible with bifacial and large PV modules.

Aesthetic & Compact

- Integrated molding box with screw free cover without welding for product stability, consistency and aesthetic .
- Water proof three layered aluminum die cast shell with reinforcing bar to withstand harsh environment conditions.
- Light weight, small volume and compact size.

Safe & Reliable

- LED | LCD display for real time data.
- Type II AC&DC Surge Protection.
- Supports AFCI Protection, preventing sparking or arcing that may potentially cause an electrical fire.
- Improved reliability with adaption of film bus capacitors.
- IP66 protection rating, C5 anti-corrosion rating, high environmental adaptability system Integration.
- Built in RS485, supports WIFI and 4G, Firmware update remotely or by USB interface.

Smart Management

- Remote firmware update and customizable settings.
- Programmable supply priority for PV, Battery or Grid.
- Energy management through free online monitoring.

SOLAR GRID TIED INVERTER

Technology Data

Model No.	CP30HL	CP33HL	CP36HL	CP40HL	CP45HL	CP50HL	CP60HL
Input Data (DC)							
Max. Input Power	45kW	49.5kW	54kW	60kW	67.5kW	75kW	80kW
Max. DC Voltage	1100V						
Start-up Voltage	180V						
Nominal Voltage	600V						
MPPT Voltage Range	200-1000V						
No. of MPP Trackers	3	3	3	4	4	4	
No. of PV Strings per MPP Tracker	2						
Max. Input Current per MPP Tracker	32A						
Max. Input Short-circuit Current per	40A						
Output Data (AC)							
Nominal Output Power	30kW	33kW	36kW	40kW	44kW	50kW	60kW
Max. AC Apparent Power	33kVa	36kVa	39.6kVa	45kVa	49.5kVa	55kVa	60kVa
Nominal AC Voltage 3L/N/PE ,Range	230/400v,3L/N/PE or 3L/PE						
AC Grid Frequency	50/60Hz						
Frequency Range	45-55Hz						
Max. Output Current (PF=O.9)	48.3A	54.5A	60A	66.7A	75.04A	84.1A	92A
Power Factor	>0.99%(Austalile fram leedingto 8.8 legging)						
Adjustable Power Factor Range	0.8 leading ... 0.8 lagging						
Max. Total Harmonic Distortion	<3% (Rated Power)						
Efficiency							
Max. Efficiency	98.4%						
European Efficiency	98.2%						
MPPT Efficiency	99.9%						
Protection							
Anti-flow Protection	Optional						
DC Reverse Polarity Protection	Yes						
DC Switch	Yes						
DC Surge Protection	Type II						
Insulation Resistance Monitoring	Yes						
Residual-current Monitoring Unit (GFCI)	Yes						
AC Short-circuit Protection	Yes						
AC Surge Protection	Type II						
Grid Monitoring	Yes						
Anti-islanding Protection	Yes						
String Fault Monitoring	Yes						
AFCI Protection	Optional						
General Data							
Dimensions (wx HxD)	590 x 480 x237 mm						
Weight	32 kg	32kg	32kg	34kg	34kg	35kg	36kg
Operating Temperature Range	-25 c ~+ 60 c						
Relative Humidity	0~100 %						
Altitude	4000 m(>2000 m derating)						
Self-consumption at Night	<1W						
Topology	Transfomerless						
Cooling	Intelligent Air Cooling						
Protection Rating	Ip66						
Guarantee Period	10 / 25 Year (Optional)						
Display	LED						
Communication	Yes						

CP80HL - CP110HL

CP SOLAR INVERTER

High Yield & Efficiency

- Maximum power generation time with low start up voltage and wider MPPT Voltage.
- Anti Potential Induced Degradation (PID) integrated function reducing the negative effect of PID.
- SiC power components to increase power generation.
- 150% PV array oversizing, 110% AC output overloading, 16 A input current per string to compatible with bifacial and large PV modules.

Aesthetic & Compact

- Screw free cover design, Integrated molding box without welding, good aesthetic & product stability and consistency.
- Aluminum die casting shell with reinforcing bars, 3 layer effective water-proof design, to resist harsh environment.
- Light weight, small volume and compact size.

Safe & Reliable

- LED | LCD display for real time data.
- Type II AC&DC Surge Protection.
- Supports AFCI Protection, preventing sparking or arcing that may potentially cause an electrical fire.
- Adapt film bus capacitors to improve reliability of system.
- High Environmental Adaptability system Integration, IP66 protection rating, C5 anti-corrosion rating.
- Built in RS485, supports WIFI and 4G, Firmware update remotely or by USB interface.

Smart Management

- Energy management through free online monitoring, remote firmware update with customizable settings.
- Supply Priority programmable for PV, Battery & Grid.
- Free online monitoring to enhance energy management for end user, installer and retailer.

SOLAR GRID TIED INVERTER

Technology Data

Model No.	CP80HL	CP90HL	CP99HL	CP100HL	CP110HL
Input Data (DC)					
Max. Input Power	120kW	135kW	148.5kW	150kW	165kW
Max. DC Voltage	110V				
Start-up Voltage	180V				
Nominal Voltage	600V				
MPPT Voltage Range	200-1000V				
No. of MPP Trackers	9				
No. of PV Strings per MPP Tracker	2				
Max. Input Current per MPP Tracker	32A				
Max. Input Short-circuit Current per	40A				
Output Data (AC)					
Nominal Output Power	80kW	90kW	99kW	100kW	110kW
Max. AC Apparent Power	88kVa	99kVa	109kVa	110kVa	121kVa
Nominal AC Voltage 3L/N/PE ,Range	3L/N/PE,220v/380,230/400v				
AC Grid Frequency	50/60Hz				
Frequency Range	45-55Hz				
Max. Output Current (PF=O.9)	128A	144A	158A	166.7A	175A
Power Factor	>0.99%(Austalile fram leedingto 8.8 legging)				
Adjustable Power Factor Range	0.8 leading ... 0.8 lagging				
Max. Total Harmonic Distortion	<3% (Rated Power)				
Efficiency					
Max. Efficiency	98.5%				
European Efficiency	98.1%				
MPPT Efficiency	99.9%				
Protection					
Anti-flow Protection	Optional				
DC Reverse Polarity Protection	Yes				
DC Switch	Yes				
DC Surge Protection	Type II				
Insulation Resistance Monitoring	Yes				
Residual-current Monitoring Unit (GFCI)	Yes				
AC Short-circuit Protection	Yes				
AC Surge Protection	Type II				
Grid Monitoring	Yes				
Anti-islanding Protection	Yes				
String Fault Monitoring	Yes				
AFCI Protection	Optional				
General Data					
Dimensions (wx HxD)	1040x 700 x350 mm				
Weight	88Kg				
Operating Temperature Range	-25 c ~+ 60 c				
Relative Humidity	0~100 %				
Altitude	4000 m(>2000 m derating)				
Self-consumption at Night	<4W				
Topology	Transfomerless				
Cooling	Intelligent Air Cooling				
Protection Rating	Ip66				
Guarantee Period	10 / 25 Year (Optional)				
Display	LED				
Communication	Yes				

SUNORA SOLAR

Single Phase Hybrid Inverter

SUNHYBD-3600G4 TO 6000G4

Optimal Power & Storage

- 97.6% Max. Efficiency.
- 90-135A charge/discharge current.
- UPS Switching time <10ms.
- DC 16A current input, compatible with high power PV module.

Strong Load & Back-up Capability

- 130% max. back-up output overloading @60s.
- 110% continuous AC output overloading.
- DC/AC ratio up to 1.3.
- Support diesel generator to charge battery directly, compatible with Li-ion and lead-acid batteries.

Convenient Installation & Operation

- Aesthetic, Elegant and compact size.
- LCD touchscreen color panel and app for setting & data management.
- Smartphone enabled commissioning.

Smart Management

- Programmable supply priority for PV, Battery or Grid.
- Energy management through free online monitoring, remote firmware update with customizable settings.
- Remote firmware update and customizable settings.

SOLAR GRID TIED INVERTER

Technology Data

Model No.	SUNHYBD3600G4	SUNHYBD4000G4	SUNHYBD5000G4	SUNHYBD6000G4
PV (DC)				
Recommended Max. PV Input Power	4680 Wp	5200 Wp	6500 Wp	7800 Wp
Max. Input Voltage	500 v			
Start-up Voltage	125 v			
Rated Input Voltage	370 v			
MPPT Input Voltage Range	150-430 v			
MPPT Max. Input Current	16 A			
MPPT Short-circuit Current	20 A			
No. of MPPT	2			
No. of Strings per MPPT	1			
Grid (AC)				
Max. Input Apparent Power	7590 VA	7590 VA	7590 VA	9200 VA
Rated Output Power	3600 W	4000 W	5000 W	6000 W
Max. Output Apparent Power	3960 VA	4400 VA	5500 VA	6600 VA
Rated AC Voltage	L/N/PE , 220 / 230 / 240 V			
input/Output Voltage Range	180-300 v			
Rated Output Voltage Frequency	50/60 Hz			
in/Output Voltage Frequency Range	45-55 Hz			
Rated Output Current	15.7 A	17.4 A	21.7 A	26.1 A
Max. Input/Output Current	33 / 17.2 A	33/21.5 A	33 / 23.9 A	40 / 28.7 A
Power Factor (Rated)	>0.99			
Adjustable Power Factor Range	0.8 leading ... 0.8 lagging			
Total Harmonic Distortion	<0.3%(Rated Power)			
Grid Connection Mode	L/N/PE			
AC Load Output (Off-grid)				
Rated Output Power	3600W	4000W	5000W	6000W
Max. Output Apparent Power	3960VA	4400VA	5500VA	6600VA
Rated Output Voltage (L/N/PE)	240V			
Output Voltage Range	200-240V			
Rated Output Frequency	50HZ			
Rated Output Current	15.7A	17.4A	21.7A	26.1A
Max. Output Current	17.2A	21.5A	23.9A	28.7A
Total Harmonic Distortion	<3%(R Load)			
On-grid/Off-grid Switching Time	<10ms			
Battery (DC)				
Rated Output Power	3600W	4000W	5000W	6000W
Max.Charge/Discharge Power	3600W	4000W	5000W	6000W
Rated Voltage	48V			
Battery Voltage Range	40/60V			
Max. Charge/Discharge Current	90A	110A	120A	135A
Communication Port	CAN/RS485			
Efficiency				
Max. Efficiency	97.6%			
Max. MPPT Efficiency	99.9%			
Max. European Efficiency	96.5%			
Protection				
Integrated Protection	Anti-flow Protection, DC Reverse Protection, DC Circuit Breaker, Insulation Resistor Detection			
Surge Protection	DC Type II, AC Type II			
Display and Communication				
Display	LCD+LED+APP			
Communication	RS485, 4G (Optional) , WiFi (Optional)			
General Data				
Dimensions (WxHxD)	580 x 330 x 232 mm			
Weight	20.5 kg			
Operating Temperature Range	-25-60 C			
Noise	<35dB			
Cooling	Smart Cooling			
installation Style	Wall-mounted			
Protection Rating	IP66			
Warranty	10 Years			

SUNORA SOLAR

Three Phase Hybrid Inverter

SUNHYBD-5HLG5 TO 12HLG5

Optimal Power & Storage

- 97.6% Max. Efficiency.
- 90-135A charge/discharge current.
- UPS Switching time <10ms.
- DC 16A current input, compatible with high power PV module.

Strong Load & Back-up Capability

- 130% max. back-up output overloading @60s.
- 110% continuous AC output overloading.
- DC/AC ratio up to 1.3.
- Support diesel generator to charge battery directly, compatible with Li-ion and lead-acid batteries.

Convenient Installation & Operation

- Smartphone enabled commissioning.
- LCD touchscreen color panel and app for setting & data management.
- Aesthetic, Elegant and compact size.

Smart Management

- Programmable supply priority for PV, Battery or Grid.
- Energy management through free online monitoring, remote firmware update with customizable settings.
- Remote firmware update and customizable settings.

SOLAR GRID TIED INVERTER

Technology Data

Model No.	SUNHYBD5HLG5	SUNHYBD6HLG5	SUNHYBD8HLG4	SUNHYBD10HLG5	SUNHYBD12HLG5
PV (DC)					
Recommended Max. PV Input Power	7500Wp	9000Wp	12000Wp	15000Wp	18000Wp
Max. Input Voltage	1000V				
Start-up Voltage	135V				
Rated Input Voltage	600V				
MPPT Input Voltage Range	135-900V				
MPPT Max. Input Current	16A/16A	16A/16A	16A/16A	16A/32A	16A/32A
MPPT Short-circuit Current	20A/20A	20A/20A	20A/20A	20A/40A	20A/40A
No. of MPPT	2				
No. of Strings per MPPT	1/1	1/1	1/1	1/2	1/2
Grid (AC)					
Max. Input Apparent Power	10000VA	12000VA	16000 VA	20000 VA	24000 VA
Rated Output Power	5000W	6000W	8000W	10000W	12000 W
Max. Output Apparent Power	5500VA	6600VA	8800 VA	10000 VA	13200 VA
Rated AC Voltage	3L/N/PE , 220 / 380V ,230/400 V, 240 V/4154 V				
input/Output Voltage Range	180-300 v/200-253 v				
Rated Output Voltage Frequency	50/60 Hz				
in/Output Voltage Frequency Range	45-55 Hz				
Rated Output Current	7.2 A	8.7 A	11.6 A	14.5 A	17.4 A
Max. Input/Output Current	15.2/9.8 A	18.2/11.8 A	24.2/15.8 A	30.3/19.7 A	36.4/23.6 A
Power Factor (Rated)	>0.99				
Adjustable Power Factor Range	0.8 leading ... 0.8 lagging				
Total Harmonic Distortion	<0.3%(Rated Power)				
Grid Connection Mode	3L/N/PE				
AC Load Output (Off-grid)					
Rated Output Power	5000W	6000W	8000W	10000W	12000W
Max. Output Apparent Power	5000W	6000W	8000W	10000W	12000W
Rated Output Voltage (L/N/PE)	3L/N/PE , 220 / 380V ,230/400 V, 240 V/4154 V				
Output Voltage Range	200/240V				
Rated Output Frequency	50HZ				
Rated Output Current	7.2A	8.7A	11.6A	14.5A	17.4A
Max. Output Current	9.8A	11.8A	16.8A	19.7A	23.6A
Total Harmonic Distortion	<3%(R Load)				
On-grid/Off-grid Switching Time	<10ms				
Battery (DC)					
Rated Output Power	5000W	6000W	8000W	10000W	12000W
Max.Charge/Discharge Power	12500W/5500W	12500W/6600W	12500W/8800W	12500W/11000W	12500W/13200W
Rated Voltage					
Battery Voltage Range	135/800V				
Max. Charge/Discharge Current	25A/25A				
Communication Port	CAN/RS485				
Efficiency					
Max. Efficiency	97.6%				
Max. MPPT Efficiency	99.9%				
Max. European Efficiency	97.0%				
Protection					
Integrated Protection	Anti-flow Protection, DC Reverse Protection, DC Circuit Breaker, Insulation Resistor Detection				
Surge Protection	DC Type II, AC Type II				
Display and Communication					
Display	LED+APP				
Communication	RS485/ USB ,Optional : 4G , WiFi (Optional)				
General Data					
Dimensions (WxHxD)	516 x 442 x 222 mm				
Weight	24 kg				
Operating Temperature Range	-30~+60 C				
Noise	<35dB				
Cooling	Smart Cooling				
installation Style	Wall-mounted				
Protection Rating	IP66				
Warranty	10 Years				

SUNORA®
SOLAR

Manufacturing Unit :

BL No. 2281/2/1/1, Near Salasar Minor Canal, Village- Tadkeshwar,Taluka-Mandvi, Surat, Gujarat-394 170.

Corporate Office :

365/366, Laxmi Enclave-2, Katargam, Surat, Gujarat - 395004.

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