

The logo features a stylized human figure with an orange head, a yellow body, and a dark blue dot for a head. To the right, the words "GO" and "RENEW" are stacked in a bold, dark blue, sans-serif font.

GO RENEW

**YOUR COMPLETE SOLAR PRODUCT OEM
BRANDING PARTNER**

**SOLAR PANEL | STREET LIGHT | SOLAR VFD | SOLAR STRUCTURE
HYBRID / UNIVERSAL SOLAR INVERTER | SOLAR EPC PROJECTS**



Hybrid Solar Inverter

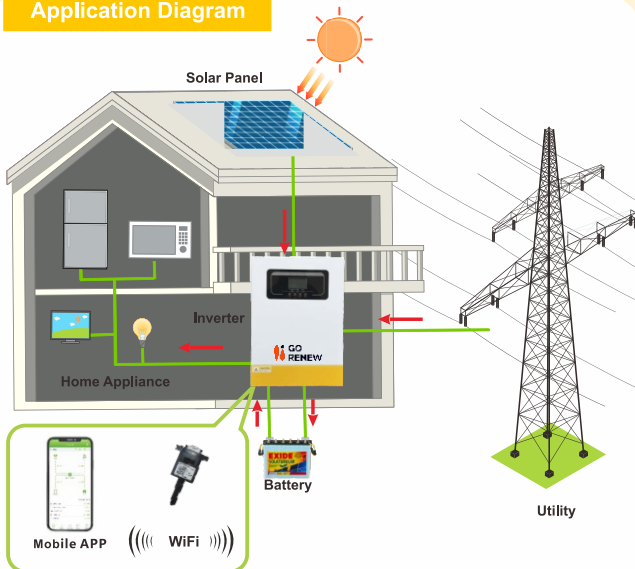
3.5KW-24V / 5.5KW-48V 220V / 230Vac Output

Features

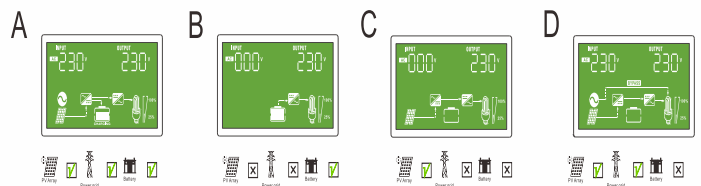
- Pure sine wave
- Output power factor 1.0
- High PV input voltage range 500Vdc Max
- Built-in MPPT solar charge controller
- Detachable dust cover for harsh environment
- Support multiple output priority: UTL, SOL, SBU, SUB
- WiFi remote monitoring optional
- Capable to work without battery
- Battery equalization function to optimize battery performance and extend lifecycle



Application Diagram



System Diagram





Technical Data

MODEL	EM3500-24	EM5500-48
CAPACITY	3.5KVA/3.5KW	5.5KVA/5.5KW
INPUT		
Nominal Voltage	230VAC	
Acceptable Voltage Range	170-280VAC(For personal Computer);90-280vac(For Home Appliances)	
Frequency	50/60 Hz(Auto sensing)	
OUTPUT		
Nominal Voltage	220/230VAC±5%	
Surge Power	7000VA	11000VA
Frequency	50/60Hz	
Waveform	Pure Sine wave	
Transfer Time	10ms(For personal Computer);20ms(For Home Appliances)	
Peak Efficiency(PV to INV)	96%	
Peak Efficiency(Battery to INV)	93%	
Overload Protection	5s@>=150% load; 10s@110%~150% load	
Crest Factor	2:1	
Admissible Power FACTOR	0.6~1 (inductive or capacitive)	
BATTERY		
Battery Voltage	24VDC	48VDC
Floating Charge Voltage	27VDC	54VDC
OverCharge Protection	33VDC	63VDC
Charging Method	CC/CV	
Solar Charger & AC Charger		
Solar Charger TYPE	MPPT	
Max.PV Array Power	4000W	5500W
Max.PV Array Open Circuit Voltage	500VDC	
PV Array MPPT Voltage Range	120VDC~450VDC	
Max.Solar Input Current	15A	18A
Max.Solar Charge Current	100A	100A
Max.AC Charge Current	60A	60A
Max.Charge Current	100A	100A
PHYSICAL		
Dimensions,D x W x H(mm)	438x295x105	
Package Dimensions,D x W x H(mm)	560x375x185	
Net Weight(Kg)	7	9
Communication Interface	RS232	
ENVIRONMENT		
Operating Temperature Range	(-10°C to 50°C)	
Storage temperature	(-15°C ~ 50°C)	
Humidity	5% to 95%Relative Humidity(Non-condensing)	

Product specifications are subject to change without further notice.

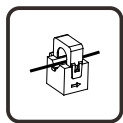
ON / OFF- GRID HYBRID INVERTER

GM Series 5.5 / 6.2KW PV 120-500Vd

C



Parallel 12 units



CT Sensor



Feed-in to
the Grid



No Battery Mode



RS232 / RS485



PF=1.0



Pure sine wave



WiFi



Product Features

- Output power factor 1.0
- High PV input voltage range 500Vdc Max
- Built-in MPPT solar controller 100A
- WiFi remote monitoring optional
- Reserved communication port for BMS
- Detachable dust cover for harsh environment
- Self-consumption and Feed-in to the grid
- User-adjustable charging current and voltage
- Programmable supply priority for PV , Battery or Grid
- Support multiple output priority: SBU / SUB / SUF / ZEC
- Parallel operation up to 12 units in 1phase or 3phase
- EQ function to optimize battery performance and extend lifecycle
- Programmable multiple operation modes :Grid-tie , off-grid and grid-tie with backup
- Backflow prevention via external CT sensor and grid connection function



Technical Data

MODEL	GM5500 - 48PL	GM6200 - 48PL
Phase	1-Phase In / 1-Phase Out	1-Phase In / 1-Phase Out
Maximum PV input power	5500W	6200W
Rated output power	5500VA / 5500W	6200VA/6200W
Lithium battery activation	Yes	Yes
Lithium battery communication	Yes	Yes
GRID-TIE OPERATION		
PV INPUT (DC)		
Nominal DC Voltage / Maximum DC Voltage	360VDC / 500VDC	
Start-up Voltage / Initial Feeding Voltage	150VDC / 120VDC	
MPPT Voltage Range	120VDC ~ 450VDC	60VDC~500VDC
Number of MPP Trackers / Maximum Input Current	1 / 18A	1/27A
GRID OUTPUT (AC)		
Nominal Output Voltage	220 / 230 / 240VAC	
Output Voltage Range	170-280VAC or 90-280VAC	
Nominal Output Current	22A	27A
Power Factor	0.6~1 (inductive or capacitive)	
Maximum Conversion Efficiency (DC/AC)	94%	
OFF-GRID OPERATION		
AC INPUT		
AC Start-up Voltage / Auto Restart Voltage	100Vac / 90Vac	
Acceptable Input Voltage Range	170-280VAC or 90-280VAC	
Maximum AC Input Current	40A	
PV INPUT (DC)		
Maximum DC Voltage	500VDC	
MPPT Voltage Range	120VDC~450VDC	60VDC~500VDC
Number of MPP Trackers / Maximum Input Current	1 / 18A	1/27A
BATTERY MODE OUTPUT (AC)		
Nominal Output Voltage	220/230/240VAC	
Output Waveform	Pure Sinewave	
Efficiency (DC to AC)	94%	
HYBRID OPERATION		
PV INPUT (DC)		
Nominal DC Voltage / Maximum DC Voltage	360VDC/500VDC	
Start-up Voltage / Initial Feeding Voltage	150VDC/120VDC	
MPPT Voltage Range	120VDC~450VDC	60VDC~500VDC
Number of MPPT Trackers / Maximum Input Current	1/18A	1/27A
GRID OUTPUT (AC)		
Nominal Output Voltage	220/230/240VAC	
Output Voltage Range	170-280VAC or 90-280VAC	
Nominal Output Current	22A	27A
AC INPUT		
AC Start-up Voltage / Auto Restart Voltage	100Vac/90Vac	
Acceptable Input Voltage Range	170-280VAC or 90-280VAC	
Maximum AC Input Current	40A	
BATTERY MODE OUTPUT (AC)		
Nominal Output Voltage	48VDC	
Efficiency (DC to AC)	94%	
BATTERY & CHARGER		
Nominal DC Voltage	48VDC	48VDC
Maximum Solar Charging Current	100A	120A
Maximum AC Charging Current	60A	80A
Maximum Charging Current	100A	120A
GENERAL		
PHYSICAL		
Dimension, D x W x H (mm)	448*315*122	450x300x130
Net Weight (kgs)	11	12
INTERFACE		
Parallel Function	1-phase parallel*12 or 3-phase parallel*12	
Communication Port	RS232+RS485+ External CT Port	
ENVIRONMENT		
Humidity	5%~95% Relative Humidity (Non-condensing)	
Operating Temperature	-10°C~50°C	

*Product specifications are subject to change without further notice.



Dimensions and Installation Size (mm)

Frame Size	W	W1	H	H1	D	Installation Aperture (d)	Weight (kg)
VSR1	95	85	162	151.5	120	4.5	1.1
VSR2	110	100	173	163	135	5.5	1.5
VSR3	148	131	249	235	177	5.5	3.2

Technical data

PV Input

Maximum Input DC Voltage

VSR23: 400VDC
VSR48: 800VDC

Recommended Voc Range

VSR23: 320~370VDC
VSR48: 500~700VDC

Recommended MPPT Voltage Range

VSR23: 250~350VDC
VSR48: 450~600VDC

Starting Voltage Range

VSR23: 120~400VDC
VSR48: 250~800VDC

Grid or backup generator input

Input Voltage

VSR23: Single phase 220V (-15%~30%)
VSR48: Three phase 380V (-15%~30%)

Output specification

Rated output voltage

3PH~220V for VSR23 & 380V for VSR48

Output frequency

0~600.00Hz (Default 0 50.00Hz)

Protection

Built-in Protection

Lighting Protection, over-current, over voltage, output phase-lose, under load, under voltage, short circuit, overheating, water pump run dry etc.

General Parameters

Site Location

No direct sunshine, no dust, corrosive gas, combustible gas, oil mist, steam, dripping or salinity etc.

Altitude

0~2000m (above 1000m, derate the capacity by 1% per 100m)

Environment Temperature

-10°C~40°C (40°C ~50°C with deration)

Humidity

5~95%, non-condensation

Vibration

less than 539 m/s² (0.6g)

Storage Temperature

-20°C~+70°C

Efficiency

Rated Power≥93%

Installation

Wall or rail mounting

Protection Grade

IP20

Cooling

Forced air Cooling

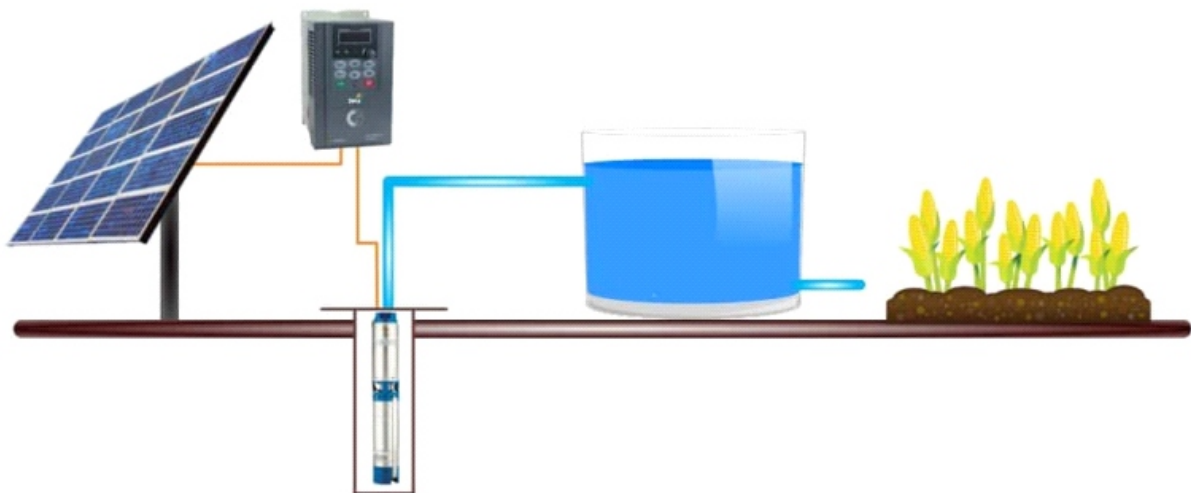
Communication

Modbus 485

EFFICIENT AND USER-FRIENDLY OPERATION FOR SOLAR PUMPING

Emotron Vsr series drives offer reliable, cost-efficient and user-friendly operation. Soft start of pumps can avoid water hammer and improve lifetime of the system. The Emotron VSR series has been specially developed for solar water pumping. Built-in self adaptive high accuracy maximum power point tracking (MPPT) algorithm of VSR ensures maximum water flow output. The compatibility of VSR with ac as well as dc input gives the flexibility to optimize the operation and improve reliability of operation.

The function of dormant state at weak light, wake up at strong light, high water level dormant state, under-load pre-warning and other control protection functions can ensure normal operation of water pumps under changing operating conditions. Thanks to variety of specially designed features of VSR, it is truly the answer to your needs.



Emotron VSR ordering codes and dimensional details

AC 220V or DC310V Input Supply

Model No.	Recommended Solar Array Power (kWp)	Maximum Input DC Current A	Output Current A	Motor kW	Frame Size
VSR231p6	0.35	2.5	1.6	0.25	VSR 1
VSR232p5	0.6	4.5	2.5	0.4	
VSR234p2	1.1	7.5	4.2	0.75	
VSR237p5	2.25	10	7.5	1.5	VSR 2
VSR239p5	3.3	18	9.5	2.2	

AC 380V&DC 540V Input Supply

Model No.	Recommended Solar Array Power (kWp)	Maximum Input DC Current A	Output Current A	Motor kW	Frame Size
VSR48003	1.1	4.5	2.5	0.75	VSR2
VSR48004	2.25	7.5	4.2	1.5	
VSR48006	3.3	10	5.5	2.2	
VSR48009	6	18	9.5	4	VSR3
VSR48013	8.9	20	13	5.5	
VSR48017	11	30	17	7.5	

ONE-STOP SOLUTION FOR ALL YOUR **FARMING NEEDS**

- PUMPS
- PIPES & FITTINGS
- WIRES & CABLES
- SOLAR



MOUNTING SYSTEMS

PRODUCT CATALOG

Reliable solar modules support

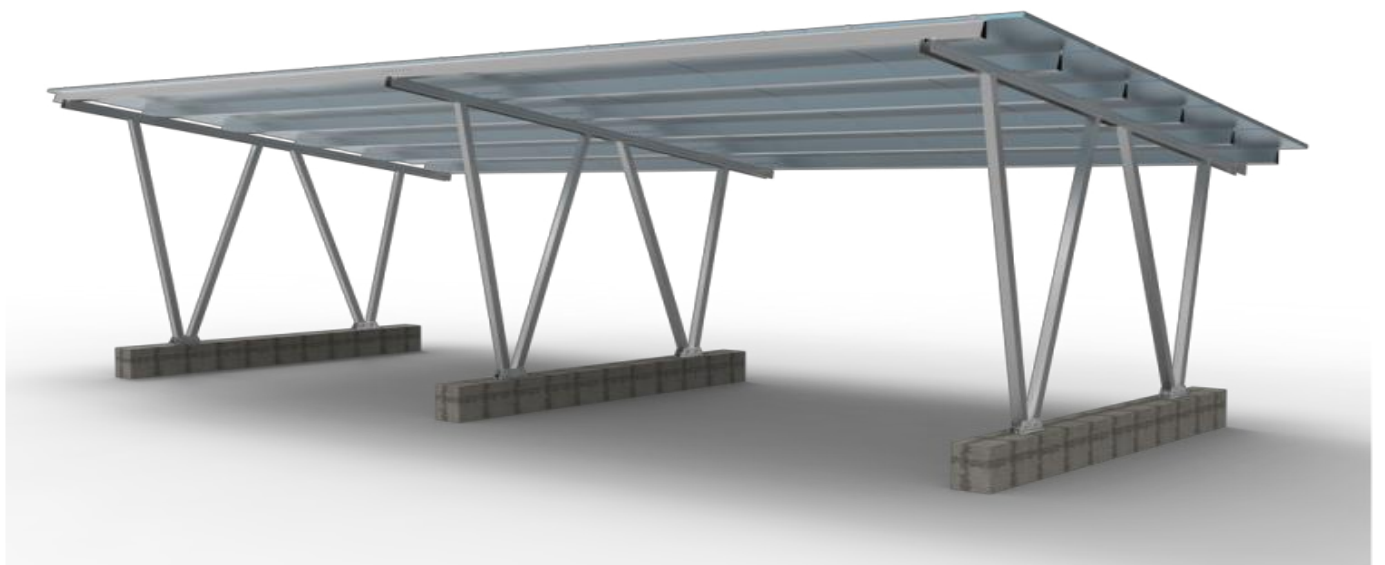
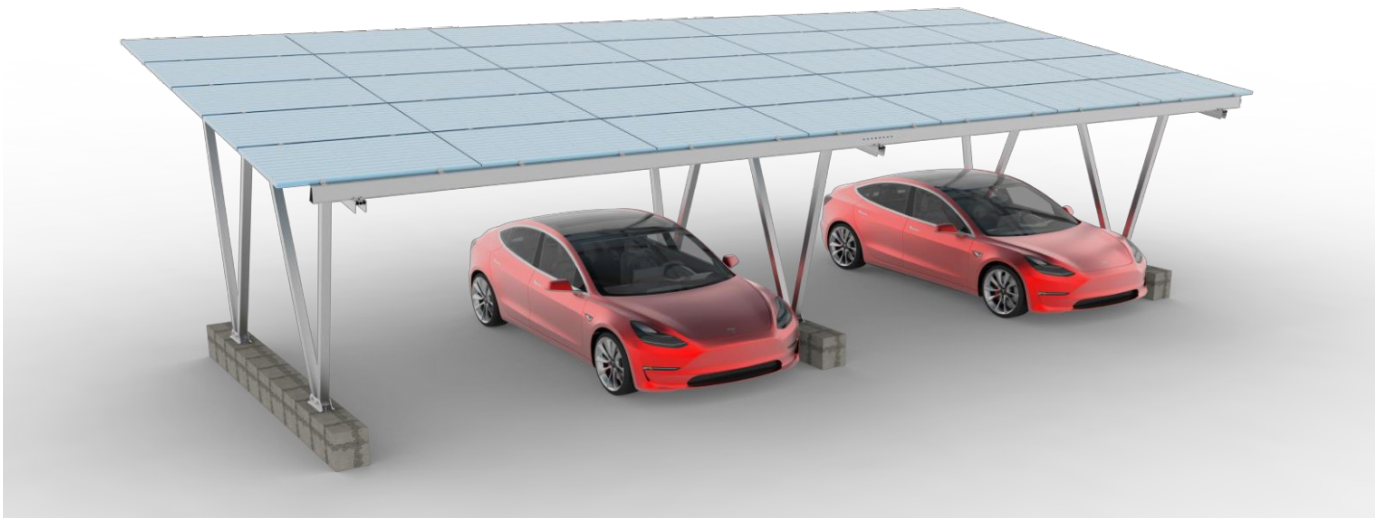
Mounting systems, as solar modules supporting equipment, represent an important part of the final solar solution. Integrated, they constitute a reliable product for long-term use. we offers wide range of high quality mounting systems patented for all common photovoltaic systems and commercial application on the ground and on different types of roofs.



Beside the standard solutions, customized solutions for specific requirements could be designed for any type of installation. Durable materials guarantee long service life while the innovative technology and simplified parts ensure easy and quick installation.

SOLAR CARPORT MOUNT

Solar carport mounting system offers simplified and economic solution providing shade for parking and solar power generation. It is designed with different options for both single and double rows of parking, tailored for most module types, orientations, and inclinations. Various foundation options include precast concrete, bored pier and ground screw. Long spans between foundations reduce cost and simplify the installation process. Solar carport effectively uses existing parking space, streamlined design making it ideal choice to present environmentally friendly image or work as electrical vehicle charging station



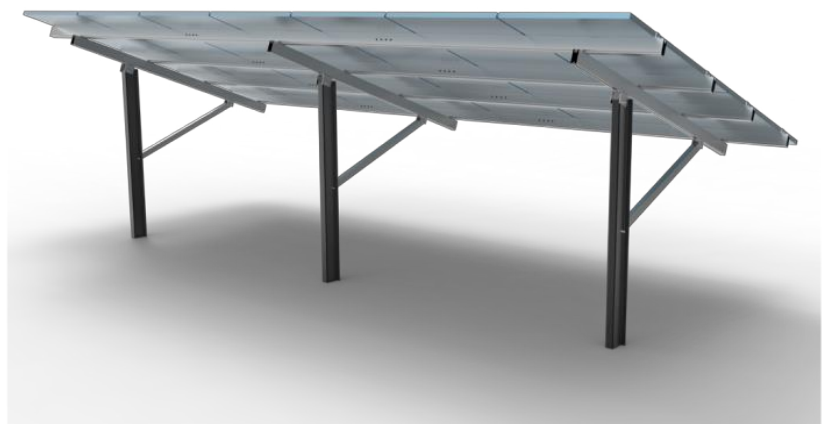
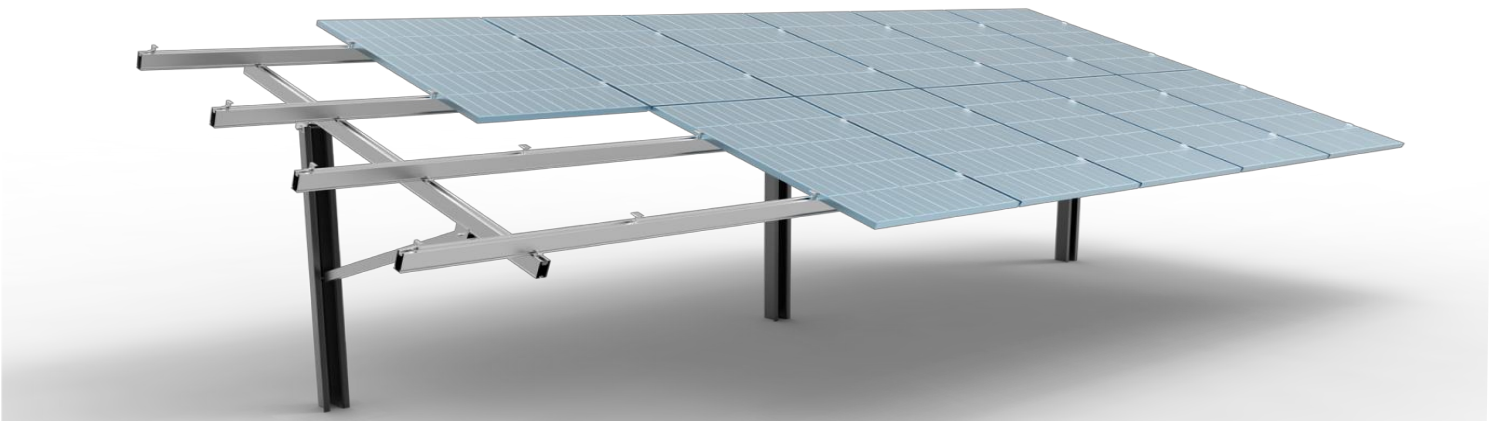
GROUND MOUNT

The GTS ground mounting system is a cost performance optimized design; the supporting footing is delivered with highest pre-assembly to unfold at site. The optimized design is carried out by experienced engineers, this is important as high loads caused by wind and snow. It can use ground screw or concrete foundations, and its variable inclination and height makes plant design flexible. Made of aluminum, the system is extremely low-maintenance during its entire life span and fully recyclable, aesthetically pleasing, ideal for quick installation



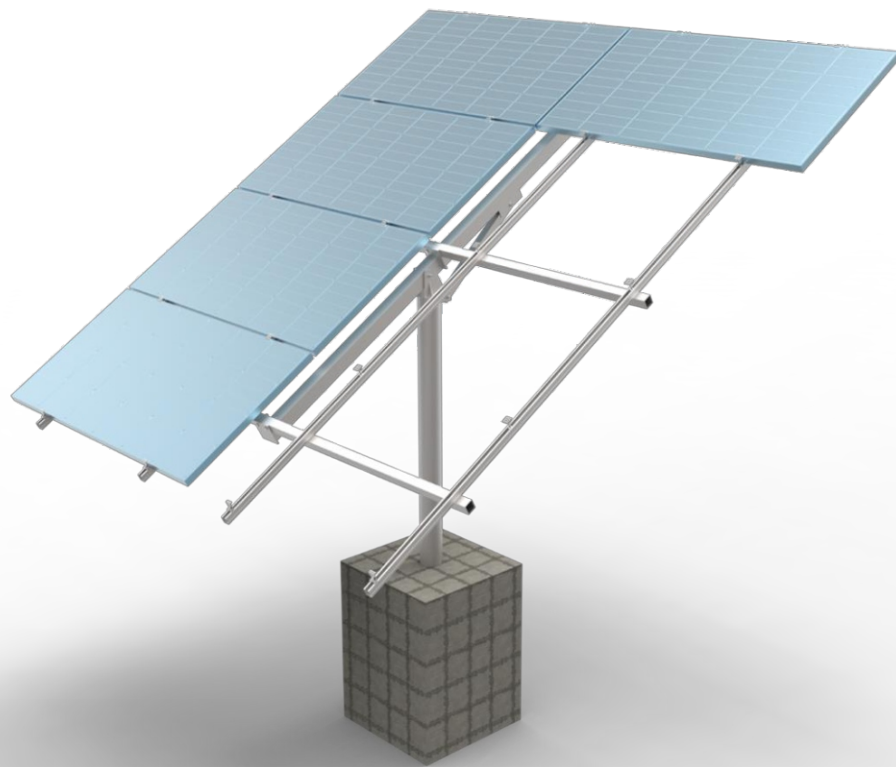
DE PILE GROUND MOUNT

The DE pile ground mounting system is a very economical solution for large commercial and utility scale installations, especially on uneven terrain. The use of ramming posts eliminate the need for additional excavation works, and pile driven machine reduce labor and time remarkably on site, piling finishes in less than 3 minutes, which means high cost saving for large projects. Single post system allows easy maintenance around and under the modules. Double post is optional for larger span and bigger array



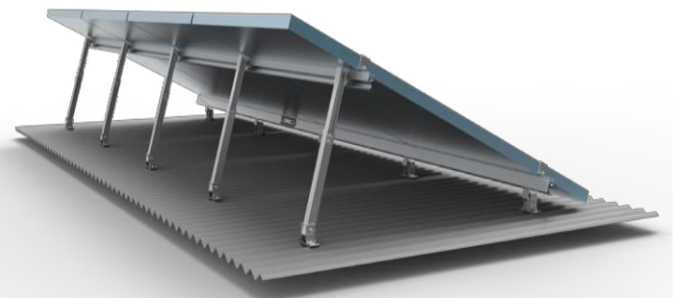
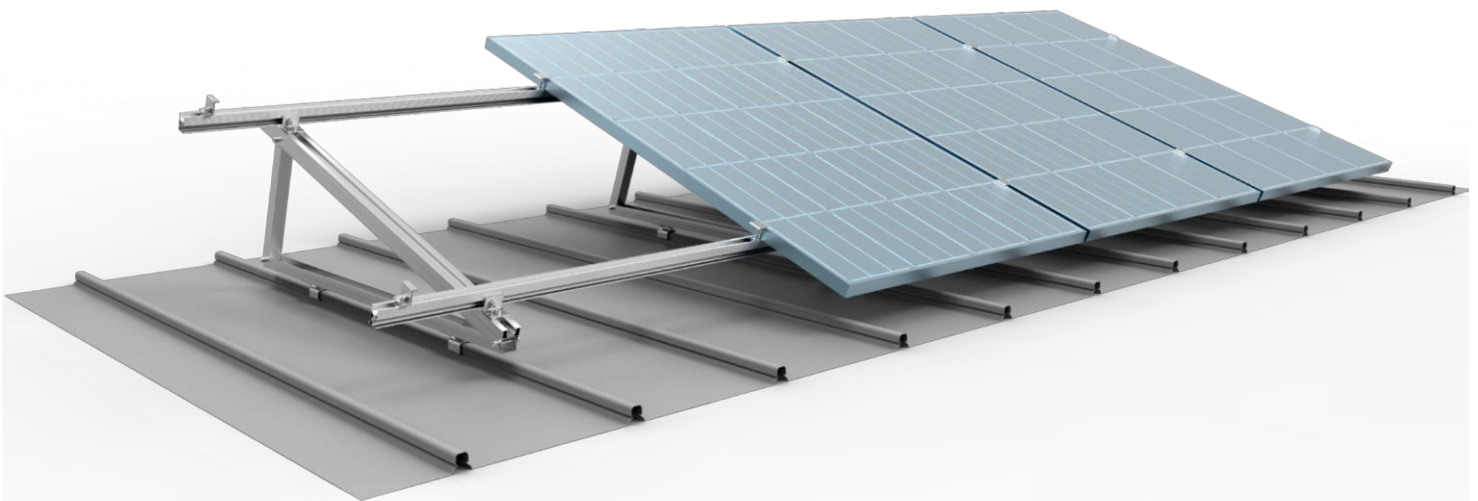
POLE GROUND MOUNT

The pole mount is a very sturdy solution for small area solar photovoltaic needs. With its 15-45° angle settings, it can support installations in a wide range of locations. The small on-grid or off-grid power station can be arranged in garden, farmland, mountain, or beside water pump, telecom tower or the outdoor electrical house. The structure is available for manually adjusted angle according to the season changing



TRIANGLE ROOF MOUNT

Delta triangle mounting bracket is a newly developed product for flat rooftop installation more cost-effective than the traditional ballast mount. It can be installed on roof clamp or penetrate into concrete, or using concrete as ballast. Fold design allows easy transportation, cost-effective warehousing and easy mounting.

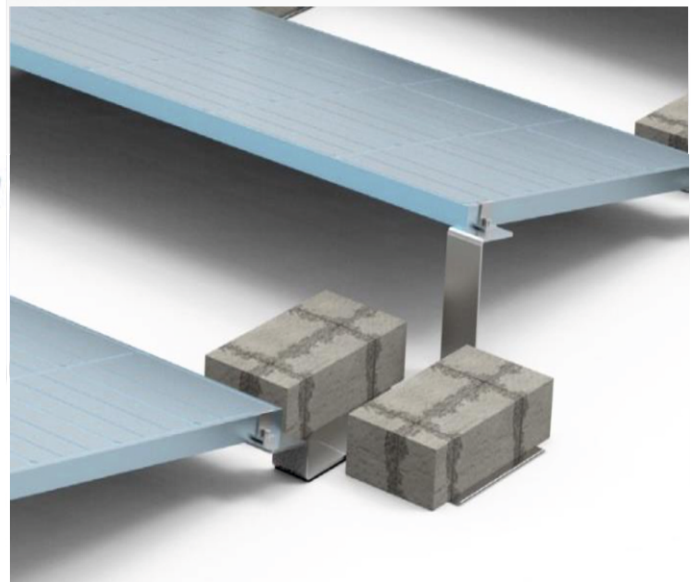
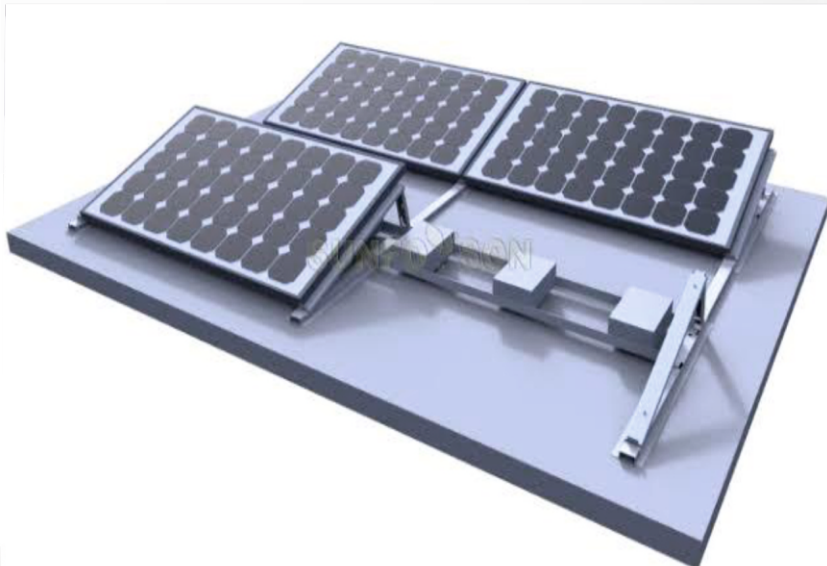
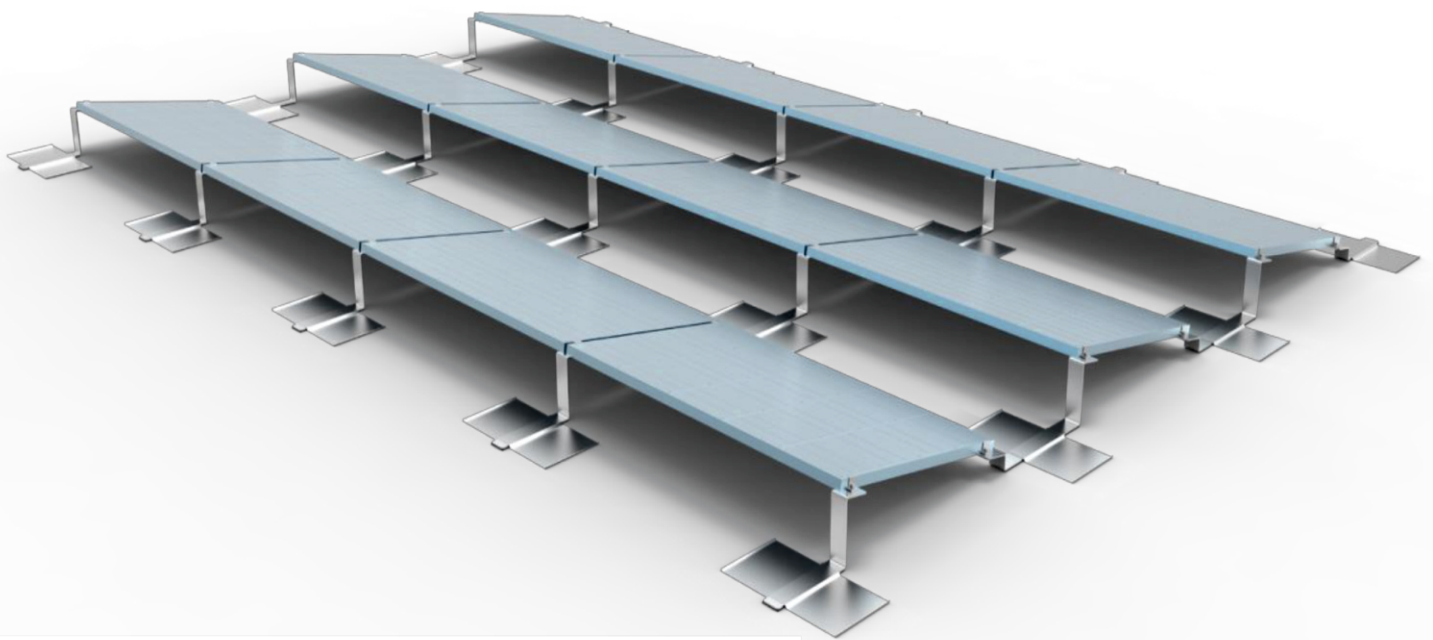




SOLAR BALLAST MOUNTING SOLUTION

RAILLESS BALLASTED MOUNT

The railless ballasted roof mounting system is suitable for commercial flat rooftops, a south-oriented racking solution, for mounting framed modules on flat roofs with 5° to 10° mounting tilts. Variable ballasted weight allows local wind rating requirements to be met on an individual basis. Eliminating rails equate to just a few boxes per system, without the inconvenience of long, cumbersome rails. The simple and straightforward installation process of the system can save time and reduce the labor cost.

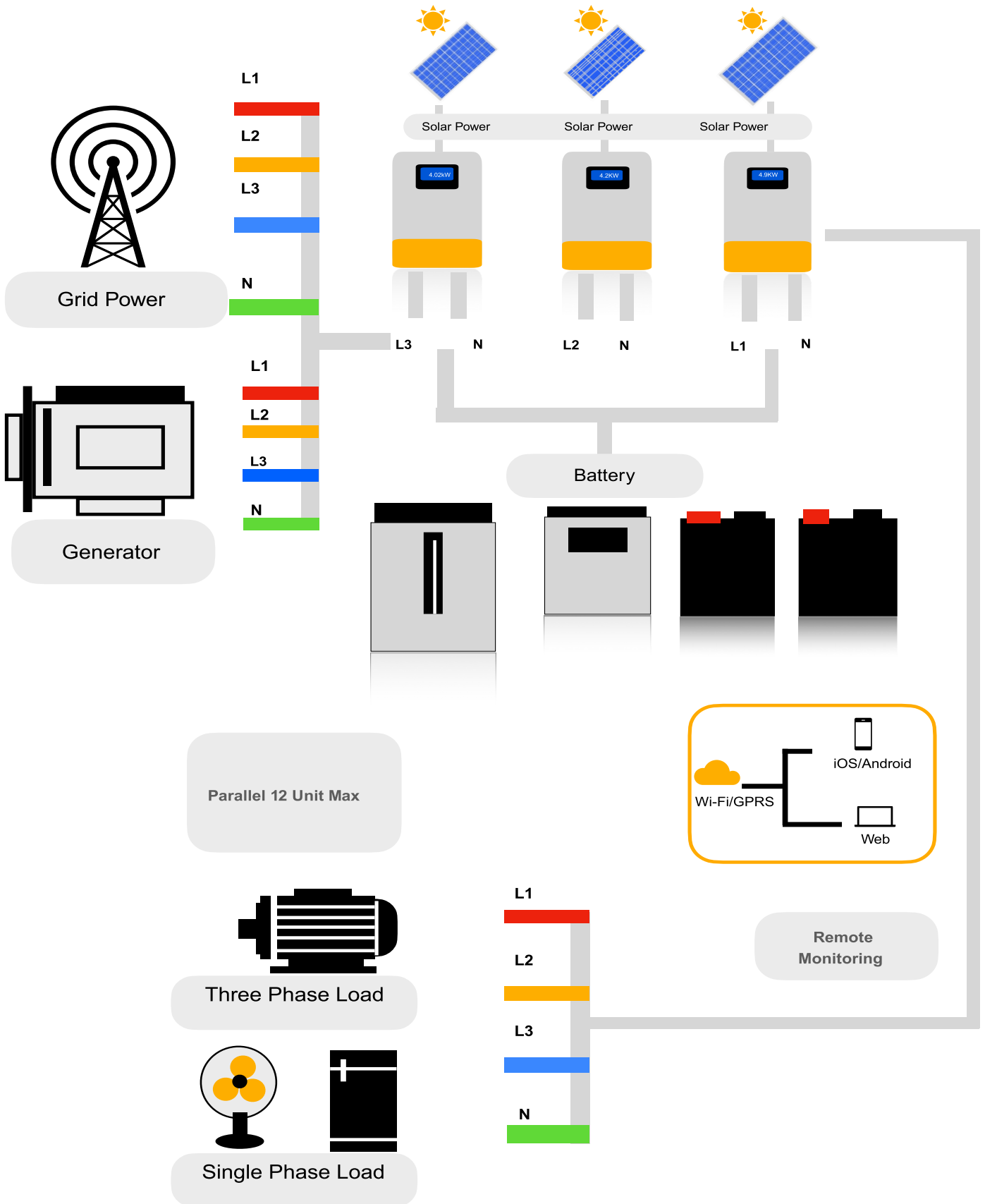


INTEGRATED SOLAR STREET LIGHT

SL	SL	9W	15W	20W	30W	40W
1	TYPE	LED SOLAR STREET LIGHTS				
2	LED WATTAGE	9W	15W	20W	30W	40W
3	OPERATING VOLTAGE	DC 12V				
4	LAMP TYPE	PHILIPS/OSRAM SMD LED 3030				
5	LED COLOR TEMPERATURE	6000K				
6	ELECTRONICS EFFICIENCY	>98%				
7	LUMINOUS EFFICIENCY	130-140 LM/W LED USED				
8	CHARGE CONTROLLER	PWM CHARGE CONTROLLER				
9	BATTERY PACK	DC 12.8V 6AH LiFePO4	DC 12.8V 12AH LiFePO4	DC 12.8V 18AH LiFePO4	DC 12.8V 24AH LiFePO4	DC12.8V 30AH LiFePO4
10	SOLAR PANEL	40Wp/36 CELLS POLY CRYSTALINE	80Wp/36 CELLS POLY CRYSTALINE	100Wp POLY CRYSTALINE	120Wp POLY CRYSTALINE	150Wp POLY CRYSTALINE
11	CABINET	DIE CUST ALLUMINIUM				
12	BODY COLOR	GREY				
13	SHAPE	RECTANGLE				
14	ENCLOSURE RATING	IP65				
15	APPLICATION	STREET LIGHTS, BOUNDARY LIGHTS				
16	KEY FEATURE	DUSK TO DAWN FEATURES (AUTOMATIC DIMMING AFTER 4 HRS OF TURNING ON)				
17	POLE	65MM / 50MM 6 MTR GI				



Hybrid Solar System with Universal Solar Inverter





CORPORATE SOCIAL RESPONSIBILITY



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FACTORY: HATBASANTAPUR, HOOGHLY (West Bengal)-712413

<https://www.go-renew.in>