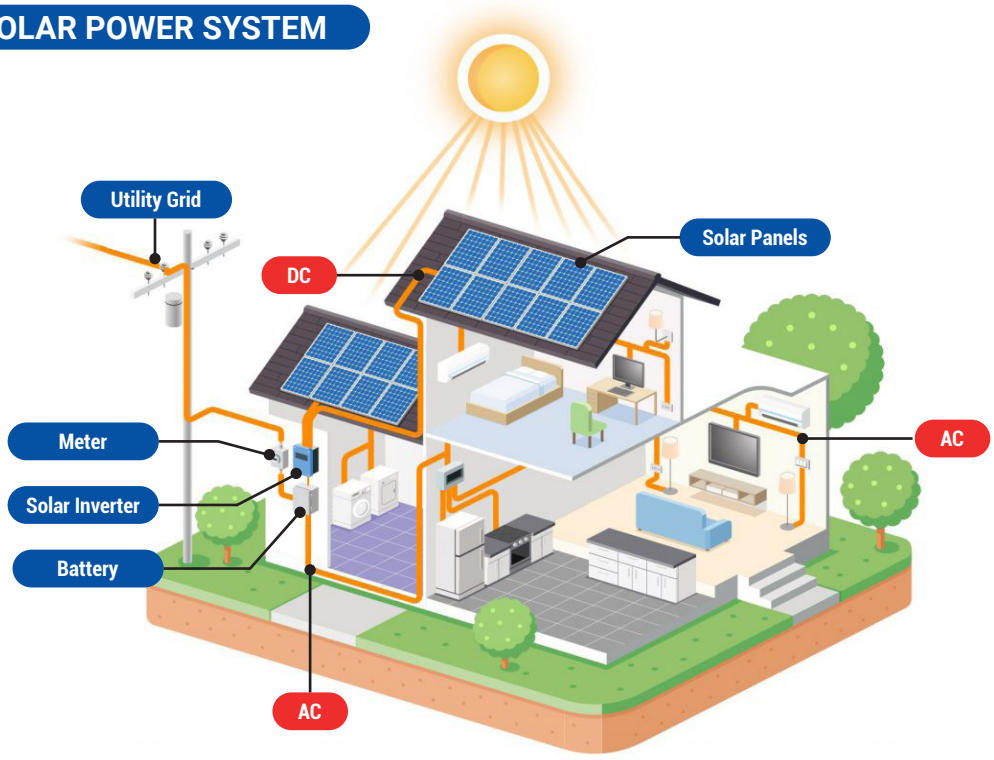
OPTONICA
SOLAR

2024

OPTONICA

SOLAR POWER SYSTEM



What components make up a solar panel system?

Solar panel installations are very straightforward systems. There are only four main components to any solar panel system, and no moving parts, making them very efficient to install and maintain. The four components of a solar panel system are:

Solar photovoltaic panels–to convert solar energy into electricity
Battery- to store DC electricity
Inverters–to convert DC electricity into AC electricity
Racking and mounting systems–to affix your solar panels to your roof (or to the ground, depending upon your installation type)
Performance monitoring systems–to track and monitor the output and health of your solar panels and inverters

OPTONICA
SOLAR POWER PRODUCTS

How does solar power work?
Solar power works by converting energy from the sun into power. There are two forms of energy generated from the sun for our use – electricity and heat.

Both are generated through the use of solar panels, which range in size from residential rooftops to 'solar farms' stretching over acres of rural land.

Is solar power a clean energy source?
Yes, solar power is a renewable and infinite energy source that creates no harmful greenhouse gas emissions – as long as the sun continues to shine, energy will be released.

The carbon footprint of solar panels is already quite small, as they last for 25 years plus with no loss in efficiency. And the materials used in the panels are increasingly recycled, so the carbon footprint will continue to shrink.

When was solar power discovered?
Solar energy was used by humans as early as the 7th century B.C., when humans used sunlight to light fires by reflecting the sun's rays onto shiny objects. Later, in 3rd century B.C., the Greeks and Romans harnessed solar power with mirrors to light torches for religious ceremonies.

In 1839 and at the age of just 19, French physicist Edmond Becquerel discovered the photovoltaic (PV) effect while experimenting with a cell made of metal electrodes in a conducting solution. He noted that the cell produced more electricity when it was exposed to light – it was a photovoltaic cell.

In 1954 PV technology was born when Daryl Chapin, Calvin Fuller and Gerald Pearson developed the silicon PV cell at Bell Labs in 1954 – the first solar cell capable of absorbing and converting enough of the sun's energy into power to run everyday electrical equipment.

Today satellites, spacecraft orbiting Earth, are powered by solar energy.

How exactly is electricity from solar energy produced?
Solar panels are usually made from silicon installed in a metal panel frame with a glass casing. When photons, or particles of light, hit the thin layer of silicon on the top of a solar panel, they knock electrons off the silicon atoms.

This PV charge creates an electric current (specifically, direct current or DC), which is captured by the wiring in solar panels. This DC electricity is then converted to alternating current (AC) by an inverter. AC is the type of electrical current used when you plug appliances into normal wall sockets.

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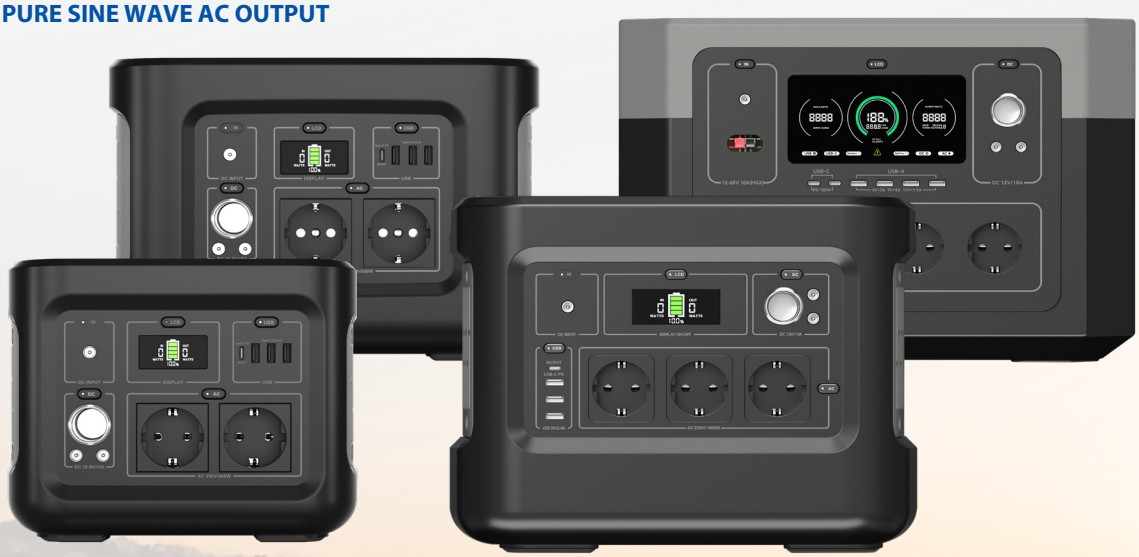
PORTABLE
POWER STATION
PURE SINE WAVE AC OUTPUT

IDEAL FOR OUTDOOR & RECREATION



400W

Cell Capacity: 400W/320Wh
DC Input: 12V-24V/0-10A (120W Max)
AC Output: 230Vac 400W
DC Output: 12V/0-10A
Cigar Socket Output: 13.3V/10A
USB-A Output: 5V/2.4A
USB-C Output: 20V/3A max
LED Flashlight: 3W

SKU: 9418

600W

Cell Capacity: 600W/512Wh
DC Input: 12V-24V/0-10A (120W Max)
AC Output: 230Vac 600W
DC Output: 12V/0-10A
Cigar Socket Output: 13.3V/10A
USB-A Output: 5V/2.4A
USB-C Output: 20V/5A max
LED Flashlight: 3W

SKU: 9419

1000W

Cell Capacity: 1000W/1036.8Wh
DC Input: 12V-24V/0-10A (200W Max)
AC Output: 230Vac 1000W
DC Output: 12V/0-10A
Cigar Socket Output: 13.3V/10A
USB-A Output: 5V/2.4A
USB-C Output: 20V/5A max
LED Flashlight: 3W

SKU: 9420

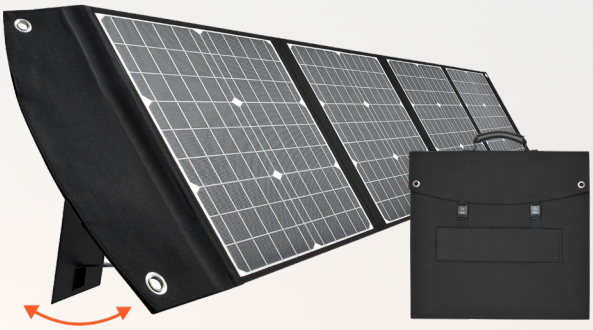
2000W

Cell Capacity: 2000W/2096Wh
DC Input: 12V-65V/0-10A (650W Max)
AC Output: 230Vac 2000W
DC Output: 12V-65V/0-10A
Cigar Socket Output: 13V/10A
USB-A Output: 5V/2.4A
USB-C Output: 20V/5A max
LED Flashlight: 3W
Wireless Charge: (20W Max)

SKU: 9421

Bags for Portable Starion

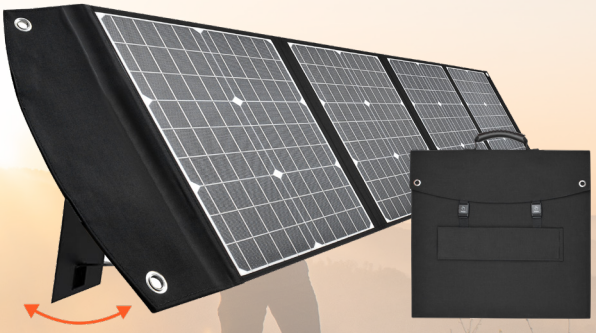
For 400W - SKU: 9429
For 600W - SKU: 9428
For 1000W - SKU: 9422
For 2000W - SKU: 9423



MONOCRYSTALLINE PORTABLE SOLAR PANEL — 120W

Convert Efficiency: up to 21%
ETFE high Light Transmittance Film
Output: 1. MC4 18V/6.6A Max
2. USB-A QC 3.0 24W Max
3. Type-C: PD45W Max
Material: PET Monocrystalline solar panel
Intelligent charging chip

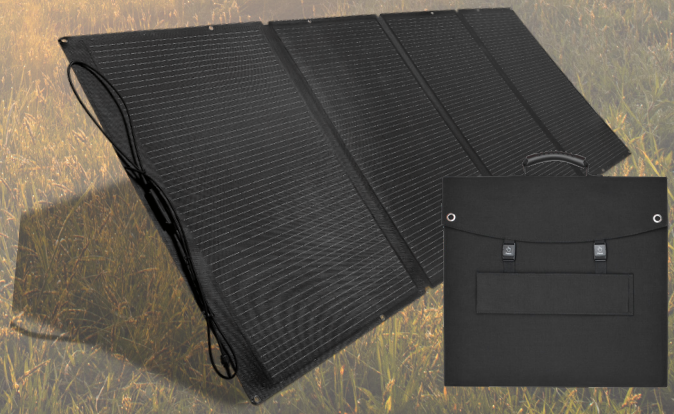
SKU: 9400



MONOCRYSTALLINE PORTABLE SOLAR PANEL — 200W

Convert Efficiency: up to 21%
ETFE high Light Transmittance Film
Output: 1. MC4 18V/11.1A Max
2. USB-A QC 3.0 24W Max
3. Type-C: PD45W Max
Material: PET Monocrystalline solar panel
Intelligent charging chip

SKU: 9401



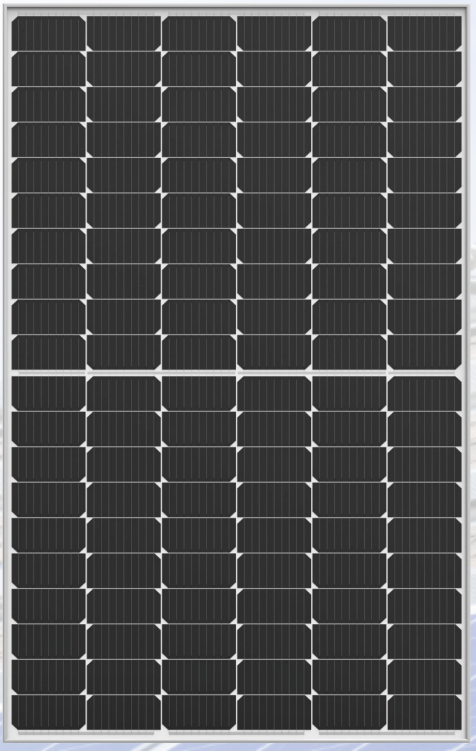
MONOCRYSTALLINE PORTABLE SOLAR PANEL — 400W

Convert Efficiency: up to 21%
ETFE high Light Transmittance Film
Output: MC4 36V/6.6A Max
Material: PET Monocrystalline solar panel
Intelligent charging chip

SKU: 9402

OPTONICA PV SOLAR PANELS

PRODUCT GUARANTEE UP TO 25 YEARS



MONOCRYSTALLINE SOLAR PV MODULE

410W

PV Model	FV410-A1	**SKU:9404**
Rated Maximum Power	(Pmax)	410W
Power Sorting		0~+5W
Voltage at Pmax	(Vmp)	31.40V
Current at Pmx	(IMP)	13.06A
Open-Circuit Current	(Voc)	37.30V
Short-Circuit Current	(Isc)	13.93A
Pv Module Clasification		CLASS II
Maximum System Voltage		1500V
Maximum Series Fuse Rating		25A
Operating Temperature		-40~85° C
Dimensions (mm)		1722x1134x30mm
Pmax /Voc / Isc Tolerance		± 3%

Tested at STC:1000W/m ; AM1.5; Cell temperature 25C°

Micro Inverter

1. Input: 2*MC4 / PV 2*210-400W
2. Output: 230Vac 600W
3. MPPT 25-55V 2*13A
4. Unit: 212*230*40mm 3.15kg
5. IP67

SKU: 9431

OPTONICA PV SOLAR PANELS

MONOCRYSTALLINE SOLAR PV MODULE

450W

PV Model	FV450-A1	**SKU:9403**
Rated Maximum Power	(Pmax)	450W
Power Sorting		0~+5W
Voltage at Pmax	(Vmp)	42.10V
Current at Pmx	(IMP)	10.69A
Open-Circuit Current	(Voc)	49.84V
Short-Circuit Current	(Isc)	11.20A
Pv Module Clasification		CLASS II
Maximum System Voltage		1500V
Maximum Series Fuse Rating		15A
Operating Temperature		-40~85° C
Dimensions (mm)		2094x1038x35mm
Pmax /Voc / Isc Tolerance		± 3%

Tested at STC:1000W/m ; AM1.5; Cell temperature 25C°

SKU: 9424

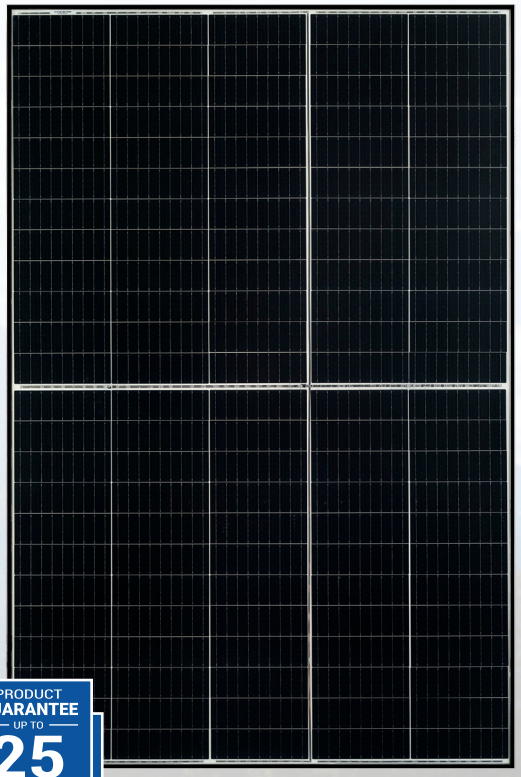
SKU: 9425

SKU: 9426

SKU: 9427

PV SOLAR PANELS

risen solar technology



MONOCRYSTALLINE SOLAR PV MODULE

410W

PV Model	FV410-A1	**SKU:9406**
Rated Maximum Power	(Pmax)	410W
Power Sorting		0~+5W
Voltage at Pmax	(Vmp)	34.89V
Current at Pmx	(IMP)	11.76A
Open-Circuit Current	(Voc)	41.90V
Short-Circuit Current	(Isc)	12.47A
Pv Module Clasification		CLASS II
Maximum System Voltage		1500V
Maximum Series Fuse Rating		20A
Operating Temperature		-40~85° C
Dimensions (mm)		1754x1096x30mm
Pmax /Voc / Isc Tolerance		± 3%

Tested at STC:1000W/m ; AM1.5; Cell temperature 25C°

PRODUCT GUARANTEE UP TO 25 YEARS

SKU: 9451,9453

4 mm² ; 6 mm²

SKU: 9452,9454

4 mm² ; 6 mm²

SKU: 9457

SKU: 9458

PV SOLAR PANELS

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TÜV SÜD

MONOCRYSTALLINE SOLAR PV MODULE

450W

PV Model	FV450-A1	**SKU:9407**
Rated Maximum Power	(Pmax)	450W
Power Sorting		0~+5W
Voltage at Pmax	(Vmp)	41.30V
Current at Pmx	(IMP)	10.90A
Open-Circuit Current	(Voc)	49.70V
Short-Circuit Current	(Isc)	11.50A
Pv Module Clasification		CLASS II
Maximum System Voltage		1500V
Maximum Series Fuse Rating		20A
Operating Temperature		-40~85° C
Dimensions (mm)		2108x1048x35mm
Pmax /Voc / Isc Tolerance		± 3%

Tested at STC:1000W/m ; AM1.5; Cell temperature 25C°

SKU: 9455 ; 9456

SKU: 9434

PV POWER OPTIMIZER

SKU: 9464

PV SOLAR PANELS

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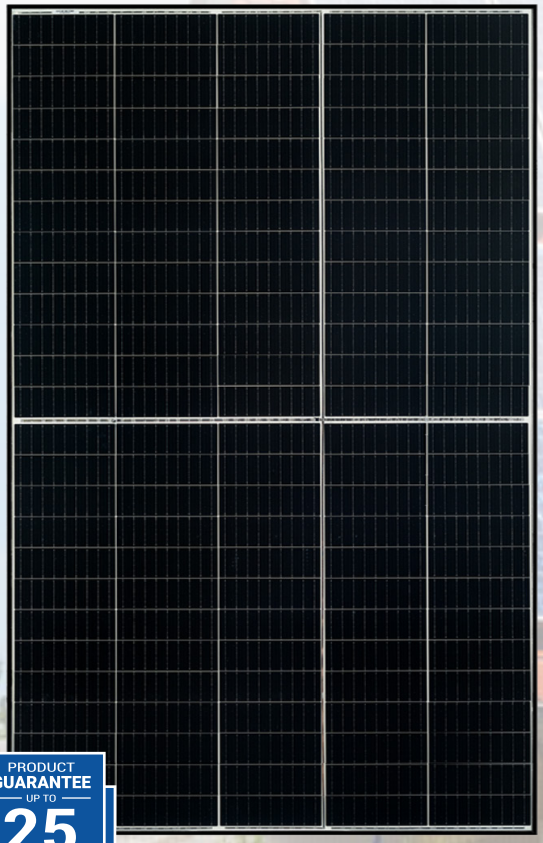

PRODUCT GUARANTEE UP TO 25 YEARS

MONOCRYSTALLINE SOLAR PV MODULE

445W

PV Model	FV445-A1	**SKU:9408**
Rated Maximum Power	(Pmax)	445W
Power Sorting		0~+5W
Voltage at Pmax	(Vmp)	45.09V
Current at Pmx	(IMP)	12.57A
Open-Circuit Current	(Voc)	37.54V
Short-Circuit Current	(Isc)	11.86A
Pv Module Clasification		CLASS I
Maximum System Voltage		1500V
Maximum Series Fuse Rating		20A
Operating Temperature		-40~85° C
Dimensions (mm)		1894x1096x30mm
Pmax /Voc / Isc Tolerance		± 3%

Tested at STC:1000W/m ; AM1.5; Cell temperature 25C°

PV SOLAR PANELS

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PRODUCT GUARANTEE UP TO 25 YEARS

MONOCRYSTALLINE SOLAR PV MODULE

550W

PV Model	FV550-A1	**SKU:9405**
Rated Maximum Power	(Pmax)	550W
Power Sorting		0~+5W
Voltage at Pmax	(Vmp)	42.20V
Current at Pmx	(IMP)	13.04A
Open-Circuit Current	(Voc)	49.80V
Short-Circuit Current	(Isc)	13.94A
Pv Module Clasification		CLASS II
Maximum System Voltage		1500V
Maximum Series Fuse Rating		25A
Operating Temperature		-40~85° C
Dimensions (mm)		2279x1134x35mm
Pmax /Voc / Isc Tolerance		± 3%

Tested at STC:1000W/m ; AM1.5; Cell temperature 25C°

PV SOLAR PANELS

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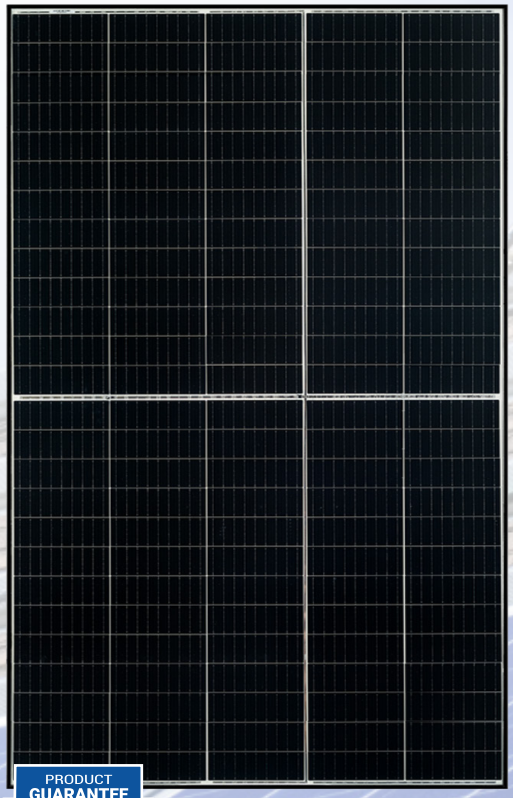
LEADING IN TECHNOLOGY



PRODUCT GUARANTEE UP TO 25 YEARS

MONO HALF-CUT MODULE BLACK FRAME

405W

UL-405-108HV

MBB 182mm Cell

PV Model		SKU:9411
Rated Maximum Power	(Pmax)	405W
Power Sorting		0~+5W
Voltage at Pmax	(Vmp)	31.3V
Current at Pmx	(IMP)	12.94A
Open-Circuit Current	(Voc)	37.3V
Short-Circuit Current	(Isc)	13.69A
Module Efficiency STC		20.74
Maximum System Voltage		1500V
Maximum Series Fuse Rating		25A
Operating Temperature		-40~85° C
Dimensions (mm)		2279/1134/35mm
Pmax /Voc / Isc Tolerance		± 3%

Tested at STC:1000W/m ; AM1.5; Cell temperature 25C°

Lower LCOE
Lower shading and resistive loss
Lower temperature coefficient

PID FREE

Anti-PID(potential induced degradation)
Passed anti-PID test under 85% damp heat, 85% relative humidity for 96 hours

PV SOLAR PANELS

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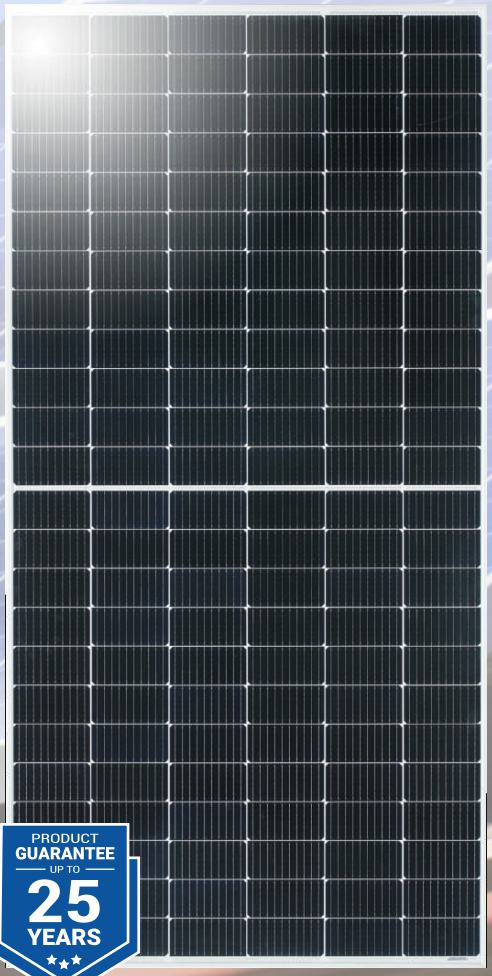
LEADING IN TECHNOLOGY

TÜV SÜD
Safety tested
Production monitored
Functional Safety



MONO HALF-CUT MODULE
SILVER FRAME

455W

UL-455M-144HV

MBB 166mm Cell

PV Model		**SKU:9410**
Rated Maximum Power	(Pmax)	455W
Power Sorting		0~+5W
Voltage at Pmax	(Vmp)	41.1V
Current at Pmx	(IMP)	11.07A
Open-Circuit Current	(Voc)	49.9V
Short-Circuit Current	(Isc)	11.64A
Module Efficiency STC		20.93
Maximum System Voltage		1500V
Maximum Series Fuse Rating		20A
Operating Temperature		-40~85° C
Dimensions (mm)		2094x1038x35mm
Pmax /Voc / Isc Tolerance		± 3%

Tested at STC:1000W/m ; AM1.5; Cell temperature 25C°

Lower LCOE
Lower shading and resistive loss
Lower temperature coefficient

PID FREE

Anti-PID(potential induced degradation)
Passed anti-PID test under 85% damp heat, 85% relative humidity for 96 hours

PV SOLAR PANELS

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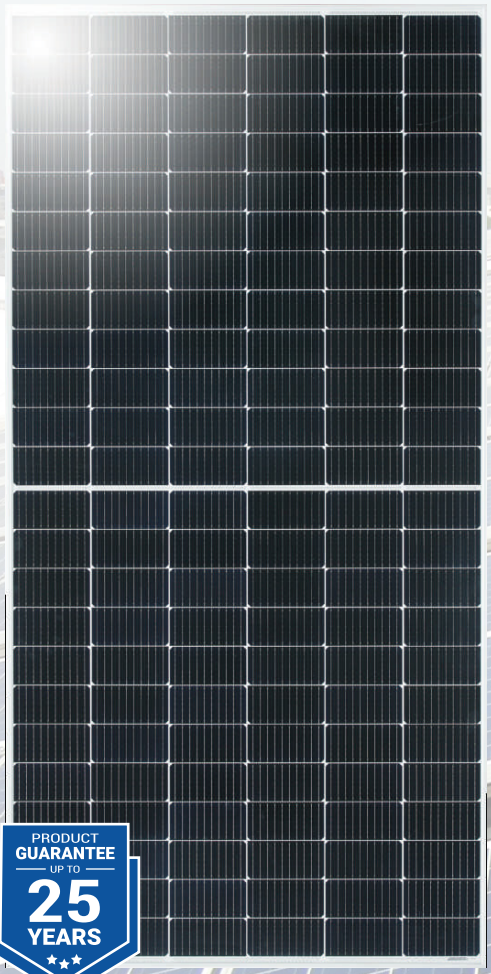
LEADING IN TECHNOLOGY



PRODUCT GUARANTEE UP TO 25 YEARS

BIFACIAL MONO PERC MODULE

550W

UL-550M-144HV

MBB 182mm Cell

PV Model		**SKU:9412**
Rated Maximum Power	(Pmax)	550W
Power Sorting		0~+5W
Voltage at Pmax	(Vmp)	41.9V
Current at Pmx	(IMP)	13.13A
Open-Circuit Current	(Voc)	50V
Short-Circuit Current	(Isc)	13.75A
Module Efficiency STC		21.28
Maximum System Voltage		1500V
Maximum Series Fuse Rating		30A
Operating Temperature		-40~85° C
Dimensions (mm)		2279/1134/35mm
Pmax /Voc / Isc Tolerance		± 3%

Tested at STC:1000W/m ; AM1.5; Cell temperature 25C°

Lower LCOE
Lower shading and resistive loss
Lower temperature coefficient

PID FREE

Anti-PID(potential induced degradation)
Passed anti-PID test under 85% damp heat, 85% relative humidity for 96 hours

PV SOLAR PANELS

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LEADING IN TECHNOLOGY

TÜV SÜD
Safety tested
Production monitored
Functional Safety

PRODUCT GUARANTEE UP TO 25 YEARS

DOUBLE-GLASS BIFACIAL MODULE

UL-570M-144DG

N-TYPE 570 TOPCON

MBB 182mm Cell

PV Model		SKU:9413
Rated Maximum Power	(Pmax)	570W
Power Sorting		0~+5W
Voltage at Pmax	(Vmp)	42.2/
Current at Pmx	(IMP)	13.51
Open-Circuit Current	(Voc)	50.7
Short-Circuit Current	(Isc)	14.23
Module Efficiency STC		22.07%
Maximum System Voltage		1500V
Maximum Series Fuse Rating		30A
Operating Temperature		-40~85° C
Dimensions (mm)		2278/1134/35mm
Pmax /Voc / Isc Tolerance		± 3%

Tested at STC:1000W/m ; AM1.5; Cell temperature 25C°

Lower LCOE
Lower shading and resistive loss
Lower temperature coefficient

PID FREE

Anti-PID(potential induced degradation)
Passed anti-PID test under 85% damp heat, 85% relative humidity for 96 hours

Double Headed Electric Photovoltaic Brush 5.5M Glass Fiber Handle AC220 or 110V AC

Applicable Voltage	110-240V	Material	Alu/Carbon fiber
Utilization Voltage	24V	Wall thickness	1-1.2mm
Power	52.8W*2	Diameter	43mm
Speed	128rpm	Length	5.5m
Torsion	1.2 N.m	Brush Size	280mm

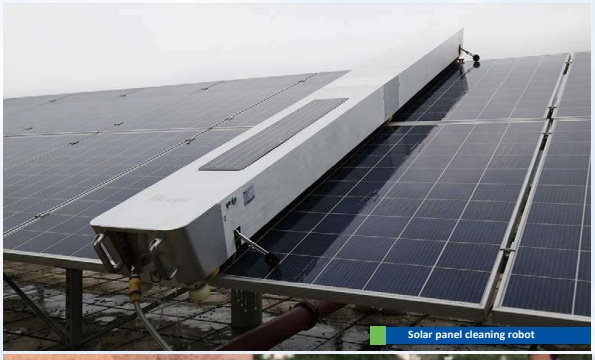
Accessories

Battery*1
Adapter*1
Water pipe and accessories*1
Backpack*1
Push button switch spring wire*1
Telescopic rod*1
Brush head assembly*1 set (including 1 pcs brush discs)

SKU: 9656

SKU: 9657 - DC24 Supply(Battery)

Solar Panel Cleaning Robot - Watering



SINGLE SOLAR PANEL CLEANING ROBOT 2384mm 150W 24V10Ah

SKU: 9658

PV Module Range	2384mm Single PV Panel
Traveling Speed	15-20 m/min
Generator Power	150W
Water Used Per Hour	330L/H
Solar Panel(W)	27W
Batery Capacity(Ah)	24V/10Ah
Cleaning Mode	Dry/Watering Cleaning
Other Functions	Speed Adjust/Direction Adjust

DOUBLE SOLAR PANEL CLEANING ROBOT 2384mm 200W 24V20Ah

SKU: 9659

PV Module Range	2384mm Double PV Panel
Traveling Speed	15-20 m/min
Generator Power	200W
Water Used Per Hour	330L/H
Solar Panel(W)	27W
Batery Capacity(Ah)	24V/10Ah
Cleaning Mode	Dry/Watering Cleaning
Other Functions	Speed Adjust/Direction Adjust

Deye

ONE-PHASE HYBRID INVERTERS

PRODUCT GUARANTEE UP TO 10 YEARS

Model	SKU: 9446	SKU: 9437	SKU: 9438
	3.6kW	5kW	6kW
Battery Input Data			
Battery Type		Lead-acid or Lithium-ion	
Battery Voltage Range (V)		40-60	
Max. Charging Current (A)	90	120	135
Max. Discharging Current (A)	90	120	135
Charging Strategy for Li-ion Battery		Self-adaption to BMS	
PV String Input Data			
Max. DC Input Power (W)	4680	6500	7800
Max. DC Input Voltage (V)	500	(125-500)	
Start-up Voltage (V)		125	
MPPT Voltage Range (V)		150-425	
Rated DC Input Voltage (V)		370	
Max. Operating PV Input Current (A)		13+13	
Max. Input Short-Circuit Current (A)		17+17	
No. of MPP Trackers/ No. of Strings per MPP Tracker		2/1+1	
AC Input/Output Data			
Rated AC Input/Output Active Power (W)	3600	5000	6000
Max. AC Input/Output Apparent Power (VA)	3960	5500	6000
Rated AC Input/Output Current (A)	16.4/15.7	22.7/21.7	27.3/26.1
Max. AC Input/Output Current (A)	18/17.2	25/23.9	30/28.7
Max. Continuous AC Passthrough (grid to load) (A)	35	40	40
Peak Power (off-grid) (W)		2 times of rated power, 10s	
Power Factor Adjustment Range		0.8 leading to 0.8 lagging	
Rated Input/Output Voltage/Range (V)		220/230 0.85Un-1.1Un	
Rated Input/Output Grid Frequency/Range(Hz)		50/45-55 , 60/55-65	
Grid Connection Form		L+N+PE	
Total Current Harmonic Distortion THDi		<3% (of nominal power)	
DC Injection Current		<0.5% In	

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THREE-PHASE HYBRID INVERTERS

Model	SKU: 9436	SKU:9435
Battery Input Data		
Battery Type	Lead-acid or Li-Ion	
Battery Voltage Range (V	40~60	
Max. Charging Current (A)	190	210
Max. Discharging Current (A)	190	210
External Temperature Sensor	Yes	
Charging Curve	3 Stages / Equalization	
Charging Strategy for Li-Ion Battery	Self-adaption to BMS	
PV String Input Data		
Max. DC Input Power (W)	10400	13000
Rated PV Input Voltage (V)	550 (160~800)	
Start-up Voltage (V)	160	
MPPT Voltage Range (V)	200-650	
Full Load DC Voltage Range (V)	350-650	
PV Input Current (A)	13+13	26+13
Max. PV I_{SC} (A)	17+17	34+17
No.of MPP Trackers	2	
No.of Strings per MPP Tracker	1	2+1
AC Output Data		
Rated AC Output and UPS Power (W)	8000	10000
Max. AC Output Power (W)	8800	11000
AC Output Rated Current (A)	12.1/11.6	15.2/14.5
Max. AC Current (A)	18.2/17.4	22.7/21.7
Max. Continuous AC Passthrough (A)	45	
Peak Power (off grid)	2 time of rated power, 10 S	
Power Factor	0.8 leading to 0.8 lagging	
Output Frequency and Voltage	50/60Hz; 3L/N/PE 220/380, 230/400Vac	
Grid Type	Three Phase	
Total Harmonic Distortion (THD)	<3% (of nominal power)	
DC current injection	<0.5% In	

PRODUCT GUARANTEE UP TO 10 YEARS

Deye

THREE-PHASE HYBRID INVERTERS

20kW 30kW 50kW

Model	SKU: 9442	SKU: 9443	SKU: 9444
Battery Input Data			
Battery Type		Lithium-ion	
Battery Voltage Range (V)	160~700	160-800	
Max. Charging Current (A)	37	50+50	
Max. Discharging Current (A)	37	50+50	
Number of Battery Input	1	2	
Charging Strategy for Li-Ion Battery		Self-adaption to BMS	
PV String Input Data			
Max. DC Input Power (W)	26000	39000	65000
Max. DC Input Voltage (V)		1000	
Start-up Voltage (V)		180	
MPPT Range (V)		150-850	
Full Load DC Voltage Range (V)	500-850	360-850	450-850
Rated DC Input Voltage (V)	600		
PV Input Current (A)	26+26	36+36+36	36+36+36+36
Max. PV I_{SC} (A)	39+39	55+55+55	55+55+55+55
No.of MPP Trackers	2	3	4
No.of Strings per MPP Tracker	2+2	2+2+2	2+2+2+2
AC Output Data			
Rated AC Output Active Power (W)	20000	30000	50000
Max AC Output Active Power (W)	22000	33000	55000
AC Output Rated Current (A)	30.4/29	45.5/43.5	75.8/72.5
Max. AC Output Current (A)	33.4/31.9	50/47.8	83.4/79.7
Max. Three-phase Unbalanced Output Current (A)	35	60	83.3
Max. Continuous AC Passthrough (A)	80	200	
Peak Power (Off Grid)		1.5 time of rated power, 10 S	
Generator Input/Smart Load /AC Couple Current (A)	30.4/80/30.4	45.5 / 200 / 45.5	75.8 / 200 / 75.8
Power Factor Adjustment Range		0.8 leading to 0.8 lagging	
Output Frequency and Voltage		50/60Hz; 3L/N/PE 220/380, 230/400Vac	
Grid Type		Three Phase	
Total Harmonics Current Distortion (THDi)		<3% (of nominal power)	
DC Current Injection		<0.5% In	

PRODUCT GUARANTEE UP TO 10 YEARS

KSTAR

Three Phase On-Grid Solar Inverter

MODEL	SKU:9491	SKU:9492	SKU:9493	SKU:9494
Input(DC)	10KW	30KW	40KW	120KW
Max. DC Voltage	1100V	1100V	1100V	1100V
Nominal Voltage	620V	600V	600V	620V
Start Voltage	180V	180V	180V	250V
MPPT Voltage Range	140V¬1000V	200V¬1000V	200V¬1000V	200V¬1000V
Number of MPPT Tracker	2	3	2	10
Strings Per MPPT Tracker	1	2	1	2
Max. Input Current Per MPPT	15A	30A	30A	30A
Max. Short-circuit Current Per MPPT	20A	50A	50A	50A
Output(AC)				
Nominal AC Output Power	10000W	30000W	40000W	120kW
Maximum AC Output Power	11000Va	33000Va	44000Va	121kVa
Nominal AC Voltage	400V 3L+N	400V 3L+N	400V 3L+N	480V 3W+PE
AC Grid Frequency Range	50/60Hz	50/60Hz	50/60Hz	50/60Hz
Maximum Output Current	16.0A	47.7A	63.6A	174.6A
Power Factor(Φ)	0.8leading-0.8lagging	0.8leading-0.8lagging	0.8leading-0.8lagging	0.8leading-0.8lagging
THDi	<3%	<3%	<3%	<3%
Efficiency				
Max. Efficiency	98.6%	98.7%	98.7%	98.7%
General Specifications				
Dimensions W x H x D	380x483x161mm	380x483x227mm	380x483x227mm	1055x700x336mm
Operating Temperature Range	-25°C¬+60°C	-25°C¬+60°C	-25°C¬+60°C	-25°C¬+60°C
Cooling Type	Natural cooling	Fan cooling	Fan cooling	Fan cooling
IP Class	IP66	IP66	IP66	IP66

Three Phase On-Grid Solar Inverter

MODEL	SKU:9480	SKU:9481	SKU:9482
Input(DC)	Max 9.6KW	Max 12.8KW	Max 16KW
Max. DC Voltage	1100V	1100V	1100V
Nominal Voltage	600V	600V	600V
Start Voltage	160V	160V	160V
MPPT Voltage Range	250~850V	180V¬1000V	180V¬1000V
Number of MPPT Tracker	2	2	2
Strings Per MPPT Tracker	1	1	1
Max. Input Current Per MPPT	14A/14A	14A/14A	14A/14A
Max. Short-circuit Current Per MPPT	18A/18A	18A/18A	18A/18A
Output(AC)			
Nominal AC Output Power	6kW	8kW	10kW
Maximum AC Output Power	6.6kVA	8.8kVA	11kVA
Nominal AC Voltage	400Vac 3L/N/PE	400Vac 3L/N/PE	400Vac 3L/N/PE
AC Grid Frequency Range	50/60Hz	50/60Hz	50/60Hz
Maximum Output Current	12.8A	12.8A	15.9A
Power Factor(Φ)	0.8leading-0.8lagging	0.8leading-0.8lagging	0.8leading-0.8lagging
THDi	<3%	<3%	<3%
Efficiency			
Max. Efficiency	98.4%	98.7%	98.7%
General Specifications			
Dimensions W x H x D	481x395x195mm	481x395x195mm	481x395x195mm
Operating Temperature Range	-30°C¬+60°C	-30°C¬+60°C	-25°C¬+60°C
Cooling Type	Natural cooling	Natural cooling	Natural cooling
IP Class	IP66	IP66	IP66

Three Phase On-Grid Solar Inverter

MODEL	SKU:9483	SKU:9484	SKU:9485	SKU:9485
Input(DC)	Max 48KW	Max 80KW	Max 150kW	Max 150kW
Max. DC Voltage	1100V	1100V	1100V	1100V
Nominal Voltage	600V	600V	620V	620V
Start Voltage	250V	250V	250V	250V
MPPT Voltage Range	200V¬1000V	200V¬1000V	180V¬1000V	180V¬1000V
Number of MPPT Tracker	3	4	9	9
Strings Per MPPT Tracker	2	3/2/3/2	2	2
Max. Input Current Per MPPT	26A	39A/26A/39A/26A	26A	26A
Max. Short-circuit Current Per MPPT	32A	48A/32A/48A/32A	40A	40A
Output(AC)				
Nominal AC Output Power	30kW	50kW	100kW	100kW
Maximum AC Output Power	33kVA	55kVA	110kVa	110kVa
Nominal AC Voltage	400Vac 3L/N/PE	230Vac/400Vac	400Vac 3L/N/PE	400Vac 3L/N/PE
AC Grid Frequency Range	50/60Hz	50/60Hz	50/60Hz	50/60Hz
Maximum Output Current	48.3A	79.7A	158.8A	158.8A
Power Factor(Φ)	0.8leading-0.8lagging	0.8leading-0.8lagging	0.8leading-0.8lagging	0.8leading-0.8lagging
THDi	<3%	<3%	<3%	<3%
Efficiency				
Max. Efficiency	98.6%	98.7%	98.7%	98.7%
General Specifications				
Dimensions W x H x D	600x430x230mm	650x450x260mm	1050x660x330mm	1050x660x330mm
Operating Temperature Range	-25°C¬+60°C	-25°C¬+60°C	-25°C¬+60°C	-25°C¬+60°C
Cooling Type	Smart Cooling	Smart Cooling	Smart Cooling	Smart Cooling
IP Class	IP66	IP66	IP66	IP66

ONE-PHASE HYBRID INVERTERS

XG8KTL

invt

PRODUCT GUARANTEE UP TO 10 YEARS

MODEL	SKU:9486
Input(DC)	Max 12KW
Max. DC Voltage	600V
Start Voltage	80V
MPPT Voltage Range	50~550V
Number of MPPT Tracker	2
Strings Per MPPT Tracker	1/1
Max. Input Current Per MPPT	20A
Max. Short-circuit Current Per MPPT	26A
Output(AC)	
Nominal AC Output Power	8kW
Maximum AC Output Power	8.8kVA
Nominal AC Voltage	220Vac/230Vac/240Vac
AC Grid Frequency Range	50/60Hz
Max. Efficiency	98.1%
General Specifications	
Dimensions W x H x D	380x380x160mm
Operating Temperature Range	-30°C¬+60°C
Cooling Type	Natural cooling
IP Class	IP66

Deye

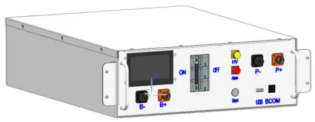
Standard 19inch Rack for 12pcs Batteries / 1pcs Controller

SKU: 9475

Dimensions: 589x590x2240mm

High Voltage Battery cluster control box

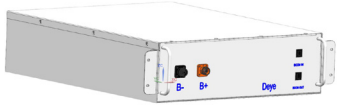
SKU: 9476



Operating Voltage	120~750Vdc
Nominal Charge/Discharge Current	100A
Max.Charge/Discharge Current	125A
DC Input Rating	12±2%V/4.15A
Operating Temperature Range	-20~65°C
Ingress Protection	IP20
Dimension (W/D/H)	440*570*150mm
Weight Approximate	15.5kg

5.12 kWh Battery module

SKU: 9477



Battery Type	LiFePO4(LFP)
Nominal Voltage	51.2Vdc
Rated Capacity	100Ah
Rated Energy	5.12kWh
Nominal Charge/Discharge Current	100A
Peak.Discharge Current	125A
Charge Temperature	0~55°C
Discharge Temperature	-20~55°C
Storage Temperature	0°C~35°C
Ingress Protecon	IP20
Dimension (W/D/H)	440*570*133mm
Weight Approximate	44kg

RECHARGEABLE LITHIUM BATTERY SYSTEM

PRODUCT GUARANTEE UP TO 10 YEARS

BATTERY LiFePo4

	10.94kWh	10.24kWh	5.12kWh
Model	**SKU:9471**	**SKU:9472**	**SKU:9473**
Nominal Capacity	228Ah	200Ah	100Ah
Nominal Energy	10.94kWh	10.24kWh	5.12kWh
Nominal Voltage	48Vdc	51.2Vdc	51.2Vdc
Discharge Current	150A	150A	100A
Cell	BYD	EVE	EVE
Ingress Protection	IP65	IP65	IP65
Weight	90kg	90kg	42.2kg

SKU: 9465 - Cables Red/Black for Battery 9471-9473 - Length 1500mm

Deye

PRODUCT GUARANTEE UP TO 5 YEARS

RECHARGEABLE LITHIUM BATTERY SYSTEM

BATTERY LiFePo4 — 6.14kWh

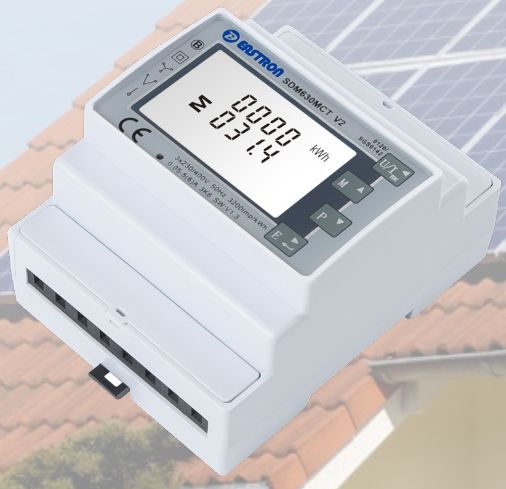
Model	**SKU:9439**
Nominal Capacity	120Ah
Nominal Energy	6.14kWh
Nominal Voltage	51.2Vdc
Operating Voltage Range	43.2~57.6Vdc
Nominal Charge/Discharge Current	60A
Ingress Protection	IP65
Operating Temperature(Charge)	0~+55 C°
Operating Temperature(Discharge)	-20~+55 C°
Storage Temperature	-20~+35 C°
DimmensionS	475x720x145mm
Weight Approximate	58 Kg

MULTI-FINCTION ELECTRICAL ENERGY METERS

Single-phase Multi-Function electrical energy meter

230V/100A/RS485/MID Certification

SKU: 9461



Three-phase Multi-Function electrical energy meter

3x230V/100A/RS485/MID certification

SKU: 9462

CT Three-phase Multi-Function electrical energy meter

3x230V/1A or 5A/RS485/MID certification

SKU: 9463

STD670V Smart Meters Kits for INVT 3-Phase Inverters
(Including wires and CT SDT024TS)

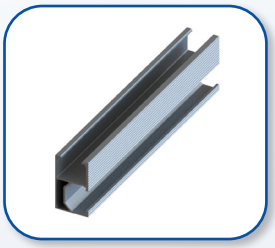
SKU: 9460

Technical Feature	Parameters
Wiring	2P3L, 3P3L, 3P4L
Voltage	2x110V/220V, 3x57.7/100V, 3x127/220V, 3x230V/400V,3x240/415V,3x400/690V 3x100V, 3x230V, 3x400V, 3x690V
	Rated 0.9 ~ 1.1Un; Max 0.7 ~ 1.2Un
Current	3x5A(Ext. CT), 3x16A, 3x32A, 3x63A, 3x100A
	Comsumption ≤4VA / line
Frequency	50 / 60Hz
Accuracy	U,I,P 0.2%, kWh 0.5%, kVarh 1.0%
Thermal drift	<200ppm
Energy Impulse	kWh impulse (open-collector)
	VCC<48V, Iz<50mA
	Constant: 10imp/kWh
Isolation	2kVAC/min (input / output / power supply)
	input / housing and output / housing >50MΩ
Installation	Standard 35mm DIN rail

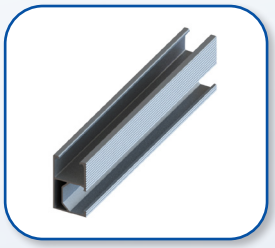
CT for SMART METER

SKU: 9466

SKU: 9601 Rail 27*45mm 2.2m



SKU: 9602 Rail 27*45mm 1.2m



SKU: 9603 End Clamp for 35mm Panel

SKU: 9604 Middle Clamp

SKU: 9605 Rooftop Hook

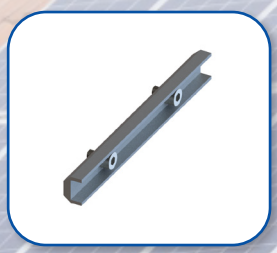
SKU: 9606 TT Nut

SKU: 9607 Screw ST6.3*80mm

SKU: 9608 Wood Screw M6.3*80mm

SKU: 9609 L -Foot with M8*25mm

SKU: 9610 Rail Joiner 200mm



SKU: 9611 Hanger Bolt with L-Foot

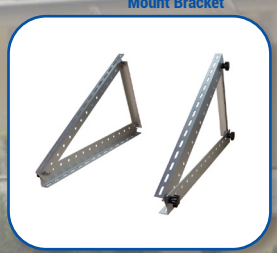
SKU: 9612 Adjustable front Leg

SKU: 9613 Adjustable rear Leg 10-15° 200mm

SKU: 9614 Adjustable rear Leg 15-30° 320mm

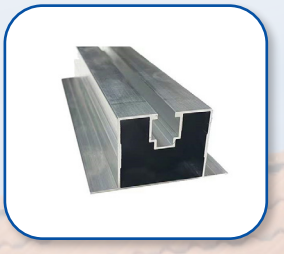
SKU: 9615 Grounding Plate

SKU: 9616 Adjustable Tilt Mount Bracket



SKU: 9617 Ballasted Strip

SKU: 9618 Mini Rail - 300mm



SKU: 9619 Rail - 2400mm

SKU: 9620 Rail+Rubber Pad 70x22x380mm

SKU: 9621 End Clamps M8x25mm for 30mm Panel

SKU: 9622 Middle Clamps Wide 20mm

SKU: 9623 End Clamp for 30mm Panel

SKU: 9624 Middle Clamp for 30mm Panel

SKU: 9625 INNER HEXAGONAL BOLT 40mm

SKU: 9626 INNER HEXAGONAL BOLT 25mm

SKU: 9627 M8 Hexagonal Nut

SKU: 9628 M8 Square Nut

SKU: 9629 Expansion Bolt 60mm

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