























Catalog **Solar Module**

Bringing electricity where you didn't think possible!

Whether you're relaxing on a boat, cabin, RV, or in remote rural areas where there is no grid to connect to, these powerful small 12V solar panels from Sonikara Solar are your ideal solutions for providing back-up power or off-grid power.

Use one panel alone or add additional panels to create a custom solar energy system. Make Sonikara solar panels part of your off-grid adventure.

> www.sonikarasolar.com Feb. 2020



Semi Flexible Shingled PERC Solar Module

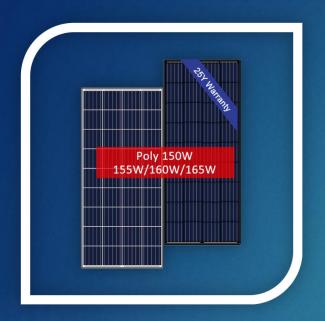
Small solar modules are easier to handle and to manage, and they have a versatility that larger, bulkier panels cannot offer. Small PV panels can easily be packed and taken on trips to a remote spot without electricity.

- BENDING OVER 30 DEGREES
- > SHINGLED PERC SOLAR CELLS
- > ETFE SURFACE
- > 5 YEARS PRODUCT WARRANTY

Module Type	CL-SS080F	CL-SS100F	CL-SS120F	CL-SS150F	CL-SS160F
Pmax (Wp)	80	100	120	150	160
Vmp (V)	18.42	18.42	17.18	20.56	18.3
Imp (A)	3.58	5.47	7.03	7.28	8.74
Voc (V)	22.32	22.32	20.83	24.92	22.2
Isc (A)	3.8	5.79	7.4	7.66	9.3
Module Dimension (mm)	1120×375	1120×530	1055 × 685	1055×845	1115 × 845
Weight(kg)	1.0	1.45	1.75	2.2	2.35
Module Efficiency (%)	16.2	16.85	16.60	16.83	16.98







Poly Solar Module 150W Series

Small solar modules are easier to handle and to manage, and they have a versatility that larger, bulkier panels cannot offer. Small PV panels can easily be packed and taken on trips to a remote spot without electricity.

- 10-YEAR PRODUCT WARRANTY
- 25-YEAR PERFORMANCE WARRANTY
- ➤ IEC61215, IEC61730 CERTIFIED

Module Type	CL-SS150P-36	CL-SS155P-36	CL-SS160P-36	CL-SS165P-36
Pmax (Wp)	150	155	160	165
Vmp (V)	17.9	18.2	18.4	18.5
Imp (A)	8.38	8.52	8.70	8.92
Voc (V)	21.3	21.7	21.8	22.4
Isc (A)	8.88	9.03	9.22	9.45
Module Dimension (mm)	$1480 \times 670 \times 35$			
Arrangement	4 × 9			
Weight(kg)	11.5			



Loading Quantity

20GP: 476pcs

• 40HQ: 1530pcs



Poly Solar Module 100W Series

Small solar modules are easier to handle and to manage, and they have a versatility that larger, bulkier panels cannot offer. Small PV panels can easily be packed and taken on trips to a remote spot without electricity.

- 10-YEAR PRODUCT WARRANTY
- 25-YEAR PERFORMANCE WARRANTY
- ➤ IEC61215, IEC61730 CERTIFIED

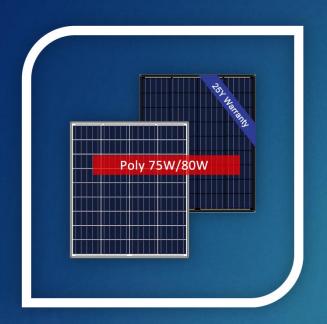
Module Type	CL-SS100P-36	CL-SS105P-36	CL-SS110P-36
Pmax (Wp)	100	105	110
Vmp (V)	17.9	18.3	18.6
Imp (A)	5.59	5.74	5.91
Voc (V)	21.3	21.8	22.4
Isc (A)	5.92	6.08	6.21
Module Dimension (mm)	1000 × 670 × 30		
Arrangement	4 × 9		
Weight(kg)	8.0		



Loading Quantity

20GP: 680pcs

• 40HQ: 2244pcs



Poly Solar Module 80W Series

Small solar modules are easier to handle and to manage, and they have a versatility that larger, bulkier panels cannot offer. Small PV panels can easily be packed and taken on trips to a remote spot without electricity.

- 10-YEAR PRODUCT WARRANTY
- 25-YEAR PERFORMANCE WARRANTY
- ➤ IEC61215, IEC61730 CERTIFIED

Module Type	CL-SS075P-36	CL-SS080P-36
Pmax (Wp)	75	80
Vmp (V)	17.9	18.4
Imp (A)	4.19	4.35
Voc (V)	21.3	21.8
Isc (A)	4.44	4.61
Module Dimension (mm)	770 × 6	70 × 30
Arrangement	4 × 9	
Weight(kg)	6	.0



Loading Quantity

20GP: 1088pcs

• 40HQ: 2856pcs



Poly Solar Module 50W Series

Small solar modules are easier to handle and to manage, and they have a versatility that larger, bulkier panels cannot offer. Small PV panels can easily be packed and taken on trips to a remote spot without electricity.

- 10-YEAR PRODUCT WARRANTY
- 25-YEAR PERFORMANCE WARRANTY
- ➤ IEC61215, IEC61730 CERTIFIED

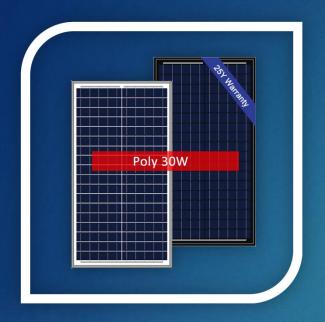
Module Type	CL-SS50P-36	CL-SS55P-36
Pmax (Wp)	50	55
Vmp (V)	17.9	18.2
Imp (A)	2.79	3.02
Voc (V)	21.3	21.4
Isc (A)	2.96	3.28
Module Dimension (mm)	670 × 5	40 × 30
Arrangement	4 × 9	
Weight(kg)	4.2	



Loading Quantity

20GP: 1440pcs

• 40HQ: 4320pcs



Poly Solar Module 30W

Small solar modules are easier to handle and to manage, and they have a versatility that larger, bulkier panels cannot offer. Small PV panels can easily be packed and taken on trips to a remote spot without electricity.

- 10-YEAR PRODUCT WARRANTY
- 25-YEAR PERFORMANCE WARRANTY
- ➤ IEC61215, IEC61730 CERTIFIED

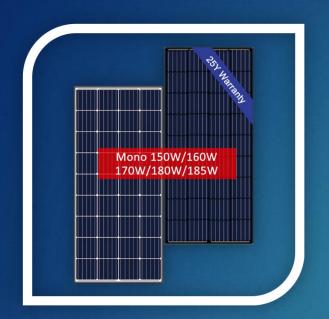
Module Type	CL-SS030P-36
Pmax (Wp)	30
Vmp (V)	17.9
Imp (A)	1.68
Voc (V)	21.3
Isc (A)	1.78
Module Dimension (mm)	$650 \times 350 \times 25$
Arrangement	2 × 18
Weight(kg)	2.6



Loading Quantity

20GP: 2400pcs

• 40HQ: 7200pcs



Mono Solar Module 150W Series

Small solar modules are easier to handle and to manage, and they have a versatility that larger, bulkier panels cannot offer. Small PV panels can easily be packed and taken on trips to a remote spot without electricity.

- > 10-YEAR PRODUCT WARRANTY
- 25-YEAR PERFORMANCE WARRANTY
- ➤ IEC61215, IEC61730 CERTIFIED

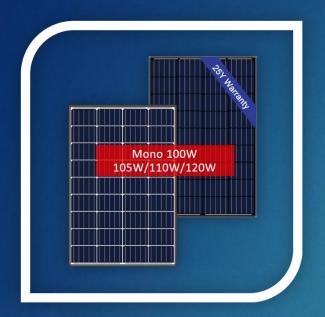
Module Type	CL-SS150M-36	CL-SS160M-36	CL-SS170M-36	CL-SS180M-36	CL-SS185M-36
Pmax (Wp)	150	160	170	180	185
Vmp (V)	18.1	18.2	18.4	18.6	18.8
Imp (A)	8.29	8.79	9.24	9.68	9.84
Voc (V)	22.1	22.2	22.4	22.6	22.8
Isc (A)	8.69	9.32	9.32	10.26	10.33
Module Dimension (mm)	$1480 \times 670 \times 35$				
Arrangement	4 × 9				
Weight(kg)	11.5				



Loading Quantity

20GP: 476pcs

40HQ: 1530pcs



Mono Solar Module 100W Series

Small solar modules are easier to handle and to manage, and they have a versatility that larger, bulkier panels cannot offer. Small PV panels can easily be packed and taken on trips to a remote spot without electricity.

- > 10-YEAR PRODUCT WARRANTY
- 25-YEAR PERFORMANCE WARRANTY
- ➤ IEC61215, IEC61730 CERTIFIED

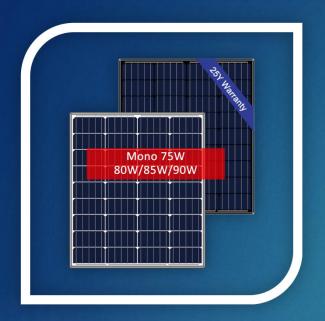
Module Type	CL-SS100M-36	CL-S\$105M-36	CL-SS110M-36	CL-SS120M-36
Pmax (Wp)	100	105	110	120
Vmp (V)	18.1	18.2	18.3	18.4
Imp (A)	5.52	5.77	6.01	6.52
Voc (V)	22.1	22.2	22.3	22.5
Isc (A)	5.86	6.12	6.31	6.85
Module Dimension (mm)	$1000 \times 670 \times 30$			
Arrangement	4 × 9			
Weight(kg)	8.0			



Loading Quantity

20GP: 680pcs

• 40HQ: 2244pcs



Mono Solar Module 80W Series

Small solar modules are easier to handle and to manage, and they have a versatility that larger, bulkier panels cannot offer. Small PV panels can easily be packed and taken on trips to a remote spot without electricity.

- > 10-YEAR PRODUCT WARRANTY
- 25-YEAR PERFORMANCE WARRANTY
- ➤ IEC61215, IEC61730 CERTIFIED

Module Type	CL-\$\$075M-36	CL-SS080M-36	CL-SS085M-36	CL-SS090M-36
Pmax (Wp)	75	80	85	90
Vmp (V)	18.1	18.2	18.4	18.7
Imp (A)	4.14	4.40	4.62	4.81
Voc (V)	22.1	22.3	22.4	22.7
Isc (A)	4.39	4.66	4.90	5.11
Module Dimension (mm)	$770 \times 670 \times 30$			
Arrangement	4 × 9			
Weight(kg)		6.0		



Loading Quantity

20GP: 1088pcs

40HQ: 2856pcs



Mono Solar Module 50W Series

Small solar modules are easier to handle and to manage, and they have a versatility that larger, bulkier panels cannot offer. Small PV panels can easily be packed and taken on trips to a remote spot without electricity.

- > 10-YEAR PRODUCT WARRANTY
- 25-YEAR PERFORMANCE WARRANTY
- ➤ IEC61215, IEC61730 CERTIFIED

Module Type	CL-SS50M-36	CL-SS55M-36
Pmax (Wp)	50	55
Vmp (V)	18.1	18.3
Imp (A)	2.76	3.01
Voc (V)	22.1	22.3
Isc (A)	2.93	3.19
Module Dimension (mm)	670 × 5	40 × 30
Arrangement	4 × 9	
Weight(kg)	4	2



Loading Quantity

20GP: 1440pcs

40HQ: 4320pcs



Mono Solar Module 30W

Small solar modules are easier to handle and to manage, and they have a versatility that larger, bulkier panels cannot offer. Small PV panels can easily be packed and taken on trips to a remote spot without electricity.

- > 10-YEAR PRODUCT WARRANTY
- 25-YEAR PERFORMANCE WARRANTY
- ➤ IEC61215, IEC61730 CERTIFIED

Module Type	CL-SS030M-36
Pmax (Wp)	30
Vmp (V)	18
Imp (A)	1.67
Voc (V)	21.9
Isc (A)	1.77
Module Dimension (mm)	$650 \times 350 \times 25$
Arrangement	2 × 18
Weight(kg)	2.6

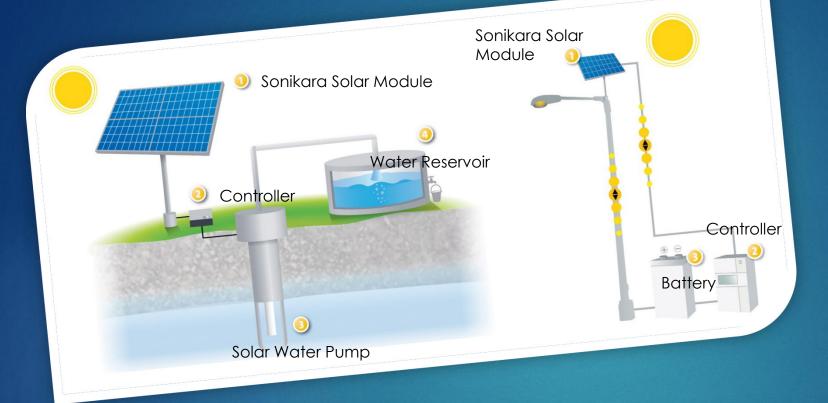


Loading Quantity

• 20GP: 2400pcs

• 40HQ: 7200pcs



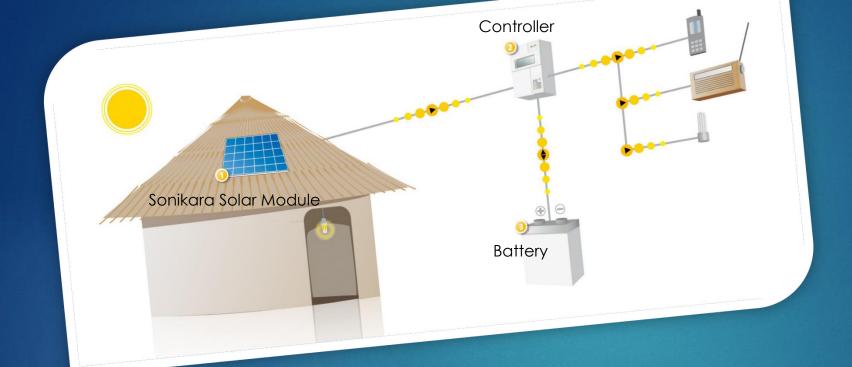


Remote Applications

- Solar Water Pumping System
 - Solar Lighting System

Access to clean drinking water and lighting are two of the most significant challenges for many remote villages and towns. Solar power systems can provide this access by using solar-powered water pumps and purification systems. These off-grid systems are simple to design and install, and often do not require batteries for electrical storage. The amount of water needed on a daily basis is pumped into a tank during daylight hours where it is stored until consumed. A small system can also be used to power street lights by adding a small battery and charge controller to provide light and safety for travelers on remote roads.



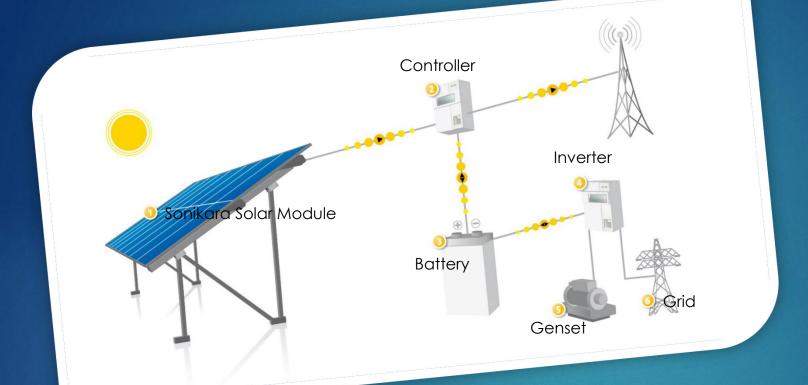


Small Homes

Solar Home System

Small homes in remote locations can now be equipped with some modern conveniences. A small-scale off-grid solar system can provide a reliable and continuous energy supply that is more economical than a diesel generator or others in long time run. The diagram above shows a system using a small solar panel, a charge controller, and a battery. Thousands of these types of systems have been installed with Sonikara Solar Products, providing critical power for safety, lighting, communications and so on.



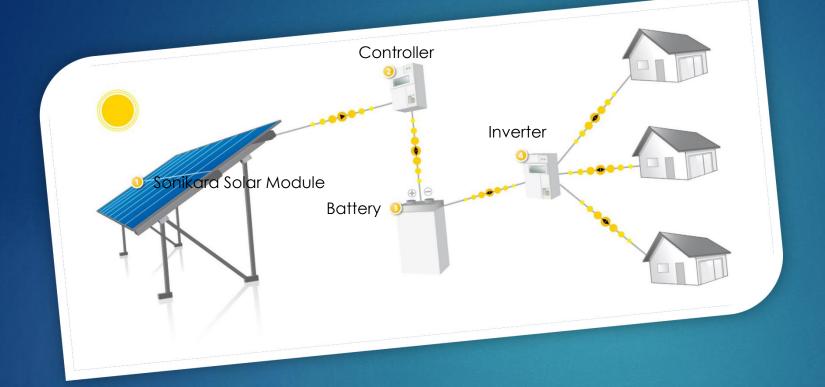


Telecommunication

> Telecom System

Telecommunication companies often run into challenges when trying to provide coverage to remote and rural locations where no grid is available to connect to for powering their transmitters. With a medium to large-scale off-grid system, telecom providers can deliver reliable, continuous service to any remote area. These systems can be designed to operate completely off-grid or as a reliable hybrid system tied to the grid, as shown above. Sonikara Solar has been supplying reliable off-grid solar systems to telecom providers for years.





Rural Power Supply

Rural Power Supply System

The sun shines brightly in many rural communities. However, they can't get access to electricity because there is no grid nearby. Those communities can turn that sunlight into electricity by using a central off-grid system to provide power that can be shared by everyone. The diagram above shows using solar panels supplying energy to a small village.



Building Green Future Expert in the manufacture of non-standard solar panels



Sonikara Solar Electro Add: Rue Nolly derrière MALIMAG immeuble Sylla Porte 29 BP E877 BAMAKO / Republique du MALI

Tel.: +223 20 72 47 59 / +223 66 69 72 73

Email: info@sonikarasolar.com |

www.sonikarasolar.com