



# SOLAR ENERGY

"Power Your Future: Save Energy, Cut Bills, and Unlock Government Subsidies."



SAVE ELECTRICITY  
BILL



PREMIUM  
QUALITY



LONG-TERM  
SAVINGS



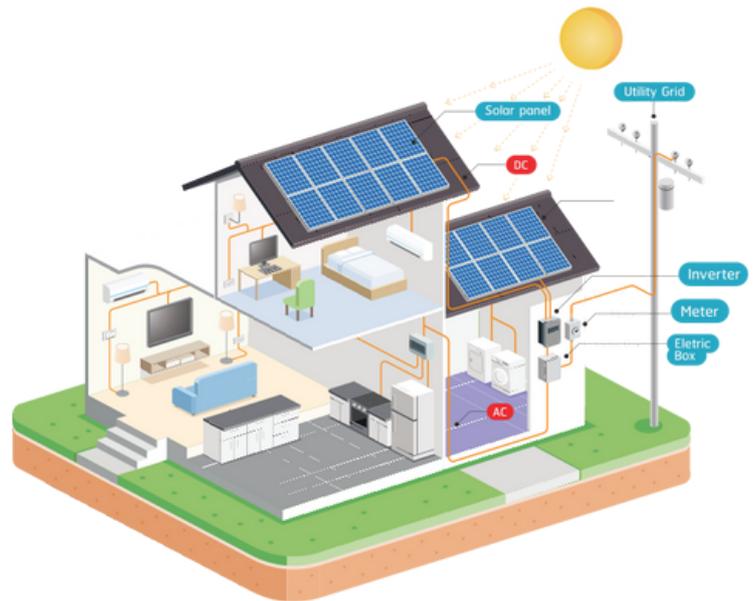
RENEWABLE &  
SUSTAINABLE

VISIT US - [WWW.SHUBHXSUNSOLAR.COM](http://WWW.SHUBHXSUNSOLAR.COM)

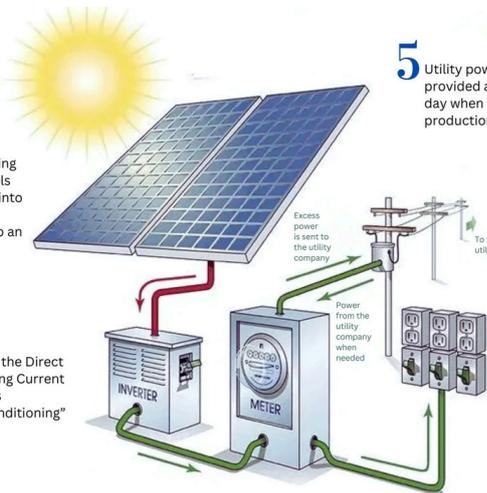
+919644159369

Solar panels turn sunlight into electricity through the photovoltaic effect. Each panel contains many solar cells, mainly made of silicon and semiconductors. Sunlight hits these cells, exciting electrons and creating electric current. This current can power devices or be sent to the grid. The U.S. Department of Energy states that Earth gets 173,000 terawatts of solar energy continuously. This amount is over 10,000 times more than the world's energy use. The sun offers free, clean, and sustainable energy. It can replace traditional electricity in our daily lives. Solar energy meets heating, lighting, and electricity needs in homes and businesses.

# HOW DO SOLAR PANELS ACTUALLY WORK?



**1** Sunlight falls on high efficient Solar panels during day hours. The solar panels convert the sun's energy into Direct Current (DC) electricity which is sent to an inverter.



**2** The inverter converts the Direct Current into Alternating Current (AC) electricity. This is sometimes called "conditioning" the power.

**3** When the solar energy system produces more electricity than is needed during peak Sun hours, excess electricity is automatically sent to the utility company and the electric meter actually runs backwards!

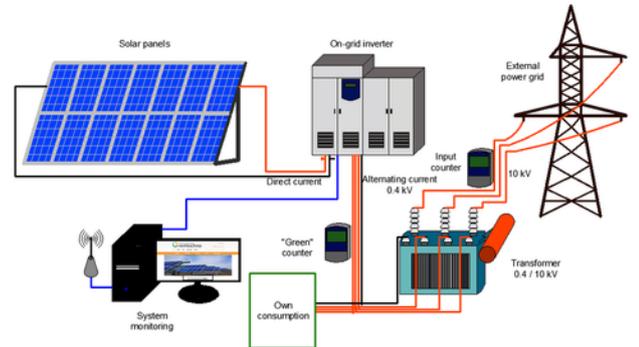
**5** Utility power is continuously provided at night and during the day when demand exceeds solar production.

**4** Solar energy systems produce very high quality electricity that reduces the chance of power fluctuations that could damage electronic equipment.

Solar panels are made of conductive materials that react to sunlight. They generate direct current (DC) electricity when sun rays hit them. Can they work on cloudy days? Yes, sunlight still reaches them through clouds. Most homes and businesses use alternating current (AC) electricity. So, DC energy from solar panels is converted to AC using an inverter. This energy can power appliances, be stored in a battery, or fed back to the grid. It all depends on your needs and goals. Solar panels tap into free, clean, renewable solar energy. This helps reduce our carbon footprint and move towards a net-zero future. Subh Solar Energy's new catalogue offers affordable clean energy. It aims to boost economic growth by promoting energy savings

Homeowners and businesses are increasingly adopting solar power. The benefits are clear, both for people and the planet. Here's why solar energy is vital:

Unlike conventional electricity, solar energy doesn't rely on fossil fuels. It avoids air and water pollution and doesn't contribute to global warming. This makes it a better choice for many. Solar energy taps into the Earth's resources. In contrast, conventional electricity depletes and harms these resources.





## WHY SOLAR ENERGY IS IMPORTANT?

There's a reason why so many homeowners and businesses are turning to solar power. The benefits are undeniable, not just for individuals, but for the planet as a whole. Here are just a few of the many reasons that highlight the importance of solar energy:

### IT'S GOOD FOR THE ENVIRONMENT

The difference between solar energy and conventional electricity is that solar energy does not rely on the use of fossil fuels, does not pollute the air or water, and does not contribute to global warming, making it the preferable option for many. Solar energy works with the Earth's natural resources, whereas conventional electricity depletes or harms them.

### IT'S A RELIABLE, COST-EFFECTIVE ENERGY SOURCE

The sun is a renewable energy source. Fossil fuels will eventually run out, but sunlight won't. For that reason, solar energy is highly reliable. And unlike fossil fuels, which are expensive to mine and utilize, it doesn't cost anything to receive sunlight. A one-time installation of solar equipment is all that's needed to reap the benefits.

### IT SAVES YOU MONEY IN THE LONG RUN

Though the cost of installing solar panels or a solar electric system has decreased in recent years, some may still find the initial investment in solar energy to be intimidating. However, the key is remembering that installation is a one-time event, whereas paying for conventional electricity is a frequent, ongoing, and expensive obligation, especially as electric rates continue to rise.

### IT PROMOTES ENERGY INDEPENDENCE

Energy independence means not having to rely on the power grid. Without other means of powering your home, you could run into a variety of issues in the event of bad weather or damage to power lines. Using solar energy, especially when paired with a backup battery system, allows you to avoid being tied to unreliable power grids when you need energy the most.



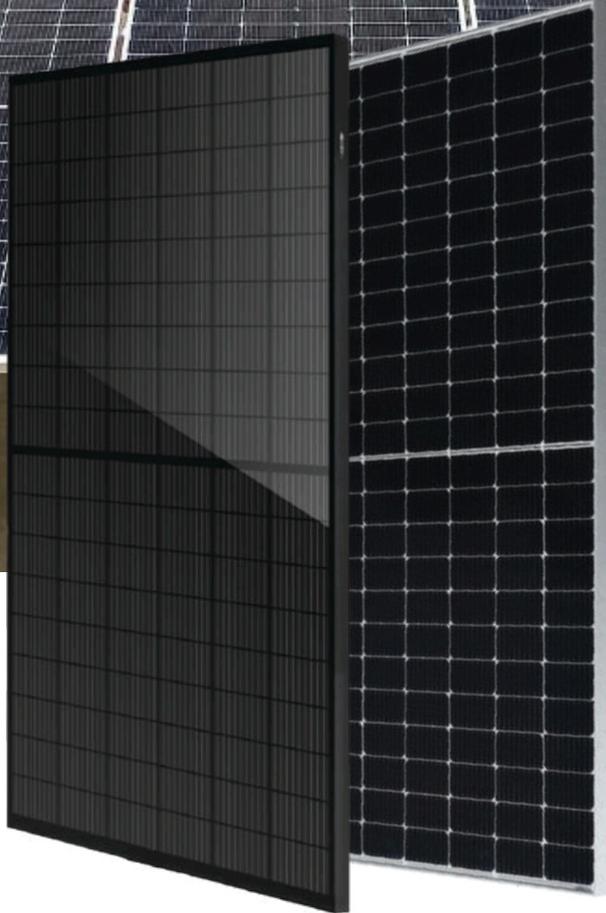


# OUR SOLAR SERVICES





# Solar Panels



UP TO  
**12** YEAR  
WARRANTY  
PRODUCT MATERIAL  
AND WORKMANSHIP

**25** YEAR  
WARRANTY  
LINEAR POWER  
OUTPUT

The sun offers endless energy, unlike limited fossil fuels. Solar energy is thus dependable. It's free, needing only an initial setup.

Energy independence means not relying on the power grid. Without it, bad weather or damaged lines can cause problems. Solar power, especially with backup batteries, ensures you avoid these issues. It keeps you away from unreliable grids during crucial times.

Subh Solar Energy solar panels are designed to exceed their power ratings. They offer PID resistance, ensuring efficiency against high voltages, temperatures, and humidity. Moreover, their unique design boosts performance on cloudy days. Plus, a 25-year warranty guarantees top output even after decades.



#### HALF-CUT TECHNOLOGY

Unique circuit design to reduce temperature heat spots



#### SIGNIFICANTLY AVOIDING HEAT SPOT

The unique circuit design to reduce the temperature heat spot significantly, so that to reduce the power loss and then increase the output of modules.



#### LOWER COST

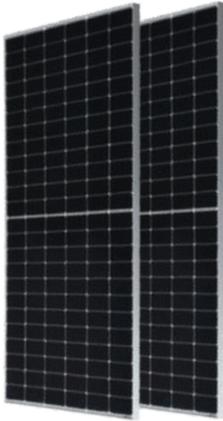
Increasing power generation can reduce the cost per kilowatt-hour



#### EXCELLENT PERFORMANCE OF PID RESISTANCE

The performance of PID resistance (Potential Induced Degradation) passed the standard of TUV Nord.





**SILVER FRAME SOLAR PANEL**

**410W**

VT-410

**1 meter**

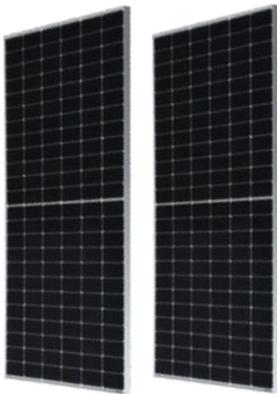
CABLE

**MECHANICAL CHARACTERISTICS**

Cell Type	No. of Cells	182*91 Mono 108
Dimensions	Weight	(12*9) 21.50kg
Junction box Operating Temperature	Qty Per	D:1722*1134*35mm 21.50kg
Pallet		IP67/IP68 3diodes -40~+850C 31pcs/pallet

**ELECTRICAL DATA (STC)**

Peak Power(Pmax)	410.00
Maximum Power Voltage(Vmp)	31.46
Maximum Power Current(Imp)	13.04
Open Circuit Voltage(Voc)	37.45±3%
Short Circuit Current(Isc)	13.85±3%
Module Efficiency(%)	20.97



**SILVER FRAME SOLAR PANEL**

**410W**

VT-410

**1 meter**

CABLE

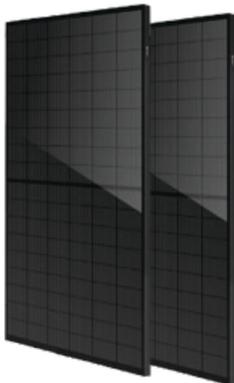
**SLIM DESIGN**

**MECHANICAL CHARACTERISTICS**

Cell Type	No. of Cells	182*91 Mono 108
Dimensions	Weight	(12*9) 21.50kg
Junction box Operating Temperature	Qty Per	D:1722*1134*30mm 21.50kg
Pallet		IP67/IP68 3diodes -40~+850C 37pcs/pallet

**ELECTRICAL DATA (STC)**

Peak Power(Pmax)	410.00
Maximum Power Voltage(Vmp)	31.46
Maximum Power Current(Imp)	13.04
Open Circuit Voltage(Voc)	37.45±3%
Short Circuit Current(Isc)	13.85±3%
Module Efficiency(%)	20.97



**BLACK SOLAR PANEL**

**410W**

VT-410

**1 meter**

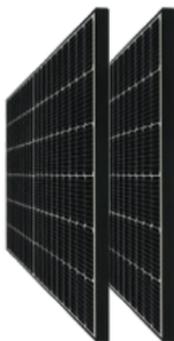
CABLE

**MECHANICAL CHARACTERISTICS**

Cell Type	No. of Cells	182*91 Mono 108
Dimensions	Weight	(12*9) 21.50kg
Junction box Operating Temperature	Qty Per	D:1722*1134*35mm 21.50kg
Pallet		IP67/IP68 3diodes -40~+850C 31pcs/pallet

**ELECTRICAL DATA (STC)**

Peak Power(Pmax)	410.00
Maximum Power Voltage(Vmp)	31.46
Maximum Power Current(Imp)	13.04
Open Circuit Voltage(Voc)	37.45±3%
Short Circuit Current(Isc)	13.85±3%
Module Efficiency(%)	20.97



**BLACK FRAME SOLAR PANEL**

**410W**

VT-410

**1 meter**

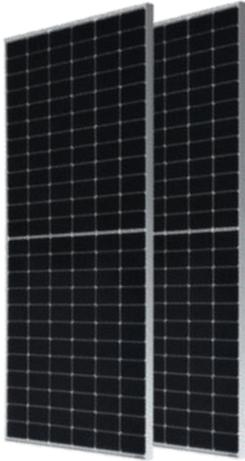
CABLE

**MECHANICAL CHARACTERISTICS**

Cell Type	No. of Cells	182*91 Mono 108
Dimensions	Weight	(12*9) 21.50kg
Junction box Operating Temperature	Qty Per	D:1722*1134*35mm 21.50kg
Pallet		IP67/IP68 3diodes -40~+850C 31pcs/pallet

**ELECTRICAL DATA (STC)**

Peak Power(Pmax)	410.00
Maximum Power Voltage(Vmp)	31.46
Maximum Power Current(Imp)	13.04
Open Circuit Voltage(Voc)	37.45±3%
Short Circuit Current(Isc)	13.85±3%
Module Efficiency(%)	20.97



## 450W

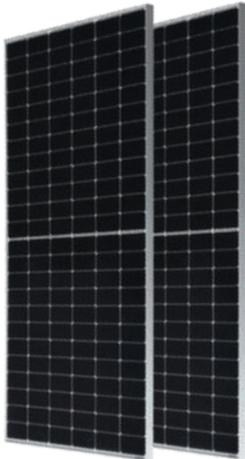
VT-450W

### MECHANICAL CHARACTERISTICS

Cell Type	No. of Cells	166*83 Mono
Dimensions	Weight	144 (12*12)
Junction box	Operating Temperature	2094*1038*35mm
Qty Per Pallet		23.50kg
Pallet		IP67/IP68 3diodes
		-40~+850C
		31pcs/pallet

### ELECTRICAL DATA (STC)

Peak Power(Pmax)	450.00
Maximum Power Voltage(Vmp)	41.50
Maximum Power Current(Imp)	10.85
Open Circuit Voltage(Voc)	49.30±3%
Short Circuit Current(Isc)	11.60±3%
Module Efficiency( % )	20.70



## 545W

VT-545W

### MECHANICAL CHARACTERISTICS

Cell Type	No. of Cells	182*91 Mono
Dimensions	Weight	144 (12*12)
Junction box	Operating Temperature	2279*1134*35mm
Qty Per Pallet		28.40kg
Pallet		IP67/IP68 3diodes
		-40~+850C
		31pcs/pallet

### ELECTRICAL DATA (STC)

Peak Power(Pmax)	545.00
Maximum Power Voltage(Vmp)	41.93
Maximum Power Current(Imp)	13.00
Open Circuit Voltage(Voc)	49.90±3%
Short Circuit Current(Isc)	13.92±3%
Module Efficiency( % )	21.08



## 665W

VT-665W

### MECHANICAL CHARACTERISTICS

Cell Type	No. of Cells	210*105 Mono
Dimensions	Weight	132 (12*11)
Junction box	Operating Temperature	2384*1303*35mm
Qty Per Pallet		33.90kg
Pallet		IP67/IP68 3diodes
		-40~+850C
		31pcs/pallet

### ELECTRICAL DATA (STC)

Peak Power(Pmax)	665.00
Maximum Power Voltage(Vmp)	38.00
Maximum Power Current(Imp)	17.50
Open Circuit Voltage(Voc)	45.80±3%
Short Circuit Current(Isc)	18.58±3%
Module Efficiency( % )	21.40

# Solar Panels Sets



We have introduced a new method to transport our solar panels. Now, we offer specially packed sets. These sets are tailored for homes and small projects. They provide a limited number of panels to meet specific needs. Our advanced 410W and 450W panels are neatly packed on mini pallets. These pallets can be easily delivered to the site, ensuring the required power and energy.

You can install a solar power system with a government subsidy of 78,000 rupees, making it affordable. This aid reduces the high installation cost substantially. Now, you can reduce your electricity bills by controlling your consumption.

**Lower Electricity Bills:** Solar panels cut your energy use, reducing bills. You only pay for installation; sunlight is free.

## Three Phase

# On-Grid Solar Inverters

**Long-Term Savings:** Solar panels need a one-time upfront cost, but save you money over time. This investment boosts your finances.

**Minimal Bills:** With enough panels, you can cover most of your electricity needs. This might lead to very low or no bills, especially if you sell back extra energy.

**Grid Support:** Some states offer net metering. This lets you sell back excess energy for credits, further lowering costs.

**Durable and Low Maintenance:** Solar panels last 10 to 25 years and need little upkeep. This maximizes savings.

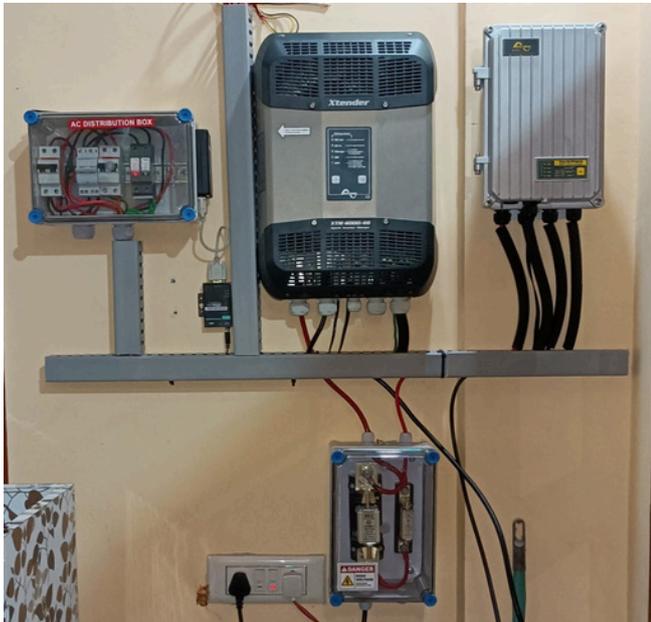


**5kW**  
VT-6605305

**8kW**  
VT-6608305

**10kW**  
VT-6610305

**05** YEAR  
WARRANTY



Zero export function  
(Optional)



External  
Inductor



Aluminum  
enclosure



Natural cooling,  
low noise



IP65  
rating



**Government Subsidy**

**of Rs 78000 available**

**Easy interest  
Free loan  
available**

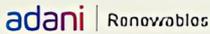
**0%**  
Emi Available



**Get a solar power system at low cost.**

With a government subsidy of 78,000 rupees, you can install a solar power system at a very low cost. This subsidy provides a significant financial benefit, reducing the high cost of solar panel installation. Now, you can control your electricity consumption at a lower cost and reduce your electricity bills.

**All top brands ALMM approved and Tier 1 companies available**



**Visit Us - [www.shubhxsunsolar.com](http://www.shubhxsunsolar.com)**



# SAVE 95% Of Your Electricity Bill

## "INVEST TODAY, REAP THE BENEFITS TOMORROW!"

- **Reduced Electricity Bills:** By using electricity generated from solar panels, you can lower your energy consumption, leading to significant reductions in your monthly electricity bills. Since sunlight is free, you only need to pay for the cost of installing the solar panels.
- **Long-term Cost Savings:** The installation of solar panels involves a significant one-time expense, but after that, you'll experience continuous savings on your electricity bills. Over time, this investment pays off and strengthens your financial position.
- **Zero or Minimal Electricity Bills:** With a sufficient solar panel setup, you can generate most of your electricity from your own panels. This can result in significantly reduced or even zero electricity bills, especially if your solar system produces excess energy that you can send back to the grid.
- **Grid Support and Net Metering:** In some states, net metering is available, allowing you to send excess solar energy back to the grid and receive credits in return. This can further reduce your electricity costs.
- **Long Lifespan and Low Maintenance Costs:** Solar panels have a long lifespan (10-25 years) and require minimal maintenance. This helps maximize your savings on electricity bills over the long run.



### PARAMETER

- AVERAGE MONTHLY ELECTRICITY BILL (BEFORE SOLAR)
- SOLAR PANEL SYSTEM SIZE
- AVERAGE SOLAR PANEL GENERATION PER DAY
- MONTHLY SOLAR ENERGY GENERATION
- ELECTRICITY RATE (PER KWH)
- MONTHLY SOLAR ENERGY OFFSET
- REMAINING ELECTRICITY BILL AFTER SOLAR USAGE
- ANNUAL SAVINGS ON ELECTRICITY BILL

### VALUE

- 4,000
- 3 KW
- 15 KWH (ASSUMING 5 HOURS OF SUN PER DAY)
- 450 KWH (15 KWH/DAY \* 30 DAYS)
- 8
- 3,600 (450 KWH \* \*8)
- 400 (₹4,000 - ₹3,600)
- 43,200 (₹3,600 \* 12 MONTHS)





# SAVE 95% OF BILL



## “SAVE 95% On Your Electricity Bill.

Here's a friendlier and more constructive version of your text:

Let's take a look at how solar energy can help us save on electricity bills!

**Average Monthly Electricity Bill (Before Solar): ₹4,000**

**Solar Panel System Size: 3 kW**

**Average Solar Panel Generation per Day: 15 kWh (We're assuming about 5 hours of sunlight each day)**

**Monthly Solar Energy Generation: 450 kWh (That's 15 kWh per day multiplied by 30 days)**

**Electricity Rate (per kWh): ₹8**

**Monthly Solar Energy Offset: ₹3,600 (This is calculated by taking 450 kWh times ₹8)**

**Remaining Electricity Bill After Solar Usage: ₹400 (This is your original bill of ₹4,000 minus the offset of ₹3,600)**

**Annual Savings on Electricity Bill: ₹43,200 (This is ₹3,600 times 12 months)**

**Switching to solar energy can cut your monthly bills. You'll save a lot over the year!**

**Feel free to ask if you need more information or further adjustments!**

**"Solar Energy leads in solar solutions for all sectors. We commit to a sustainable future by promoting renewable energy and reducing emissions."**



### Lower energy costs

Committed to a sustainable future through global renewable energy adoption and emissions reduction



### Potential tax credits

Committed to a sustainable future through global renewable energy adoption and emissions reduction



### Increased property value

Committed to a sustainable future through global renewable energy adoption and emissions reduction