SOLAMIO

Solar brings the smile...

SOLAMIO SOLAR

MAKE IN INDIA

SOLAMIO AGRO INDIA LLP

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ABOUT SOLAMIO SOLAR

Solamio solar is a green energy solution provider company, provides complete EPC & Roof top solution for large, medium & small solar power plants ranging from KW to MW scale.

We offer our utility and commercial & industrial customers reliable solar solutions,because of our vast experience as a solar power producer in building high quality solar assets, while being socially responsible.

We are a leading independent power producer & developer of solar energy with the mission to be the lowest cost power producer in India. We sell solar power on long term fixed price contracts to our customer, at prices which in many cases are at or below prevailing alternatives for these customers.

We believe in giving you power. The power not to be the victim of ever-increasing energy bills. The power of the latest technology. The power to ?nd an energy solution that won't cost you the earth.

That is why we provide some of the world's leading power-saving technology. From light bulbs that use a fraction of a regular bulb's electricity to Photo Voltaic systems that produce power from the sun.

WHO WE ARE

We are young group of engineers and highly interested in Renewable Sources of Power Generation. As you Know the Electricity is big issue of world.

Solamio Solar Power System was born out of compassion for green and clean environment and the zeal to find solutions for power crisis in the India for an overall development of rural community too.

The demand for energy is rising with the rapidly increasing Indian population. Moreover, most of the rural belts of India have inadequate, minimal or no electricity, which is a vital ingredient in the development of any community.

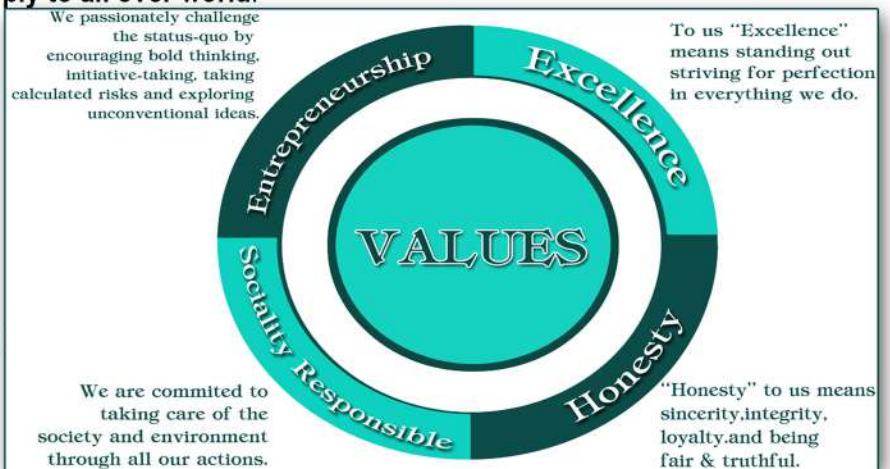
We are focusing on solar energy, one of the best options in green solar renewable energy, to provide sustainable and economical power supply to all over world.

VISION

Affordable solar power for generation.

MISSION

To be the lowest cost producer in the world



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WHY SOLAR

- ECO FRIENDLY
- NO FUEL COST
- COST EFFECTIVE TAX BENEFITS
- RENEWABLE ENERGY
- ENERGY SAVER
- NON POLLUATION
- MAINTENANCE FREE
- SAFE & SIMPLE
- LONG LIFE

OUR STRENGTHS

- MARKET LEADERSHIP
- SCALE AND BRAND NAME RECOGNITION
- IN-HOUSE EPC AND O&M EXPERTISE ENABLE COST EFFICIENCIES
- SUPERIOR TECHNICAL & EXECUTION CAPABILITIES
- STRONG MANAGEMENT

OUR APPROCH

VALUE ENGINEERING

Our in-house EPC allows us to enhance our system design expertise with each successive project, be flexible with our choice of technologies and source from top-tier suppliers that optimize both the system cost and power yield of the total solar block.

OPERATIONAL PERFORMANCE MONITORING

We operate a national operating control center ,that allows us to monitor project performance in real time and allows us to respond rapidly to potential generation anomalies .

FINANCIAL STARTEGY

We are able to offset project equity requirements through economic benefits generated by our EPC and O&M businesses. Coupled with our assets financing strategy we are able to optimize the overall cost of capital leading to enhanced economics for our customer & shareholders I

SOLAMIO SOLAR POWERPLANT

Complete solar systems installations In remote locations, where the sun's energy is abundant, solar power generation can be the ideal solution as an alternative source of energy to power applications such as telecom stations(mobile and land systems),TV transmitters and whole village electrification. Solamio provides not only expertise in consultation, design and implementation of such systems, but also, manufactures and supplies the majority of the elements required for these installations.

Drawing on over 20 years expertise from our experienced team of engineers, Solamio Solar designs, produces and implements be spoke, custom-made solar systems for small domestic (home) environments,as well as large commercial environments.

Solamio can provide a complete service, such as load requirement analysis, solar array sizing, battery selection, charge controller selection, solar support structure design, systemization, cabling, and fixtures and fitting. In addition, Solamio can supply and install all components for the system from the ground up to system commissioning, monitoring and maintenance.

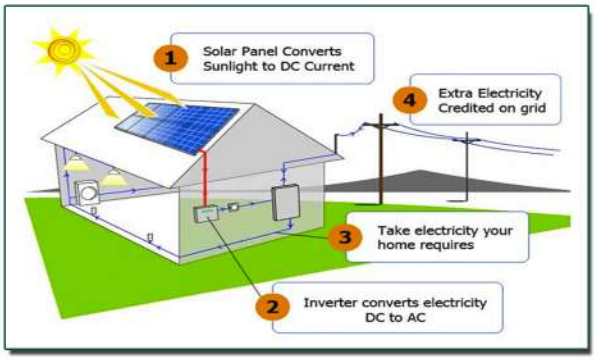
GRID TIED SOLAR POWER SYSTEMS

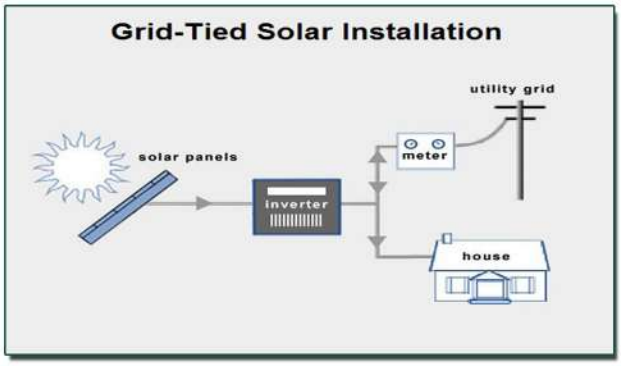
Lets make the Grid our battery bank!

The smartest way to reduce electricity bills to zero, Grid Connected roof top systems consist of an array of the highest quality PV modules installed on your rooftop. These panels are connected to a Bi-directional Utility Meter, enabling all excess power to be sold back to the Grid. This system eliminates the use of batteries thus providing an optimum power production. Grid connected Solar PV power systems range from small 1KWp systems to massive 1 MWp systems.

There are attractive Government subsidies for residential and non pro?t institutions, as well as 80% depreciation for Commercial installations.

The area required for a 1KWp system is approximately 108 sq. ft. Depending on your location, a 1KWp system can provide 4 - 5 units of electricity per day.





A grid-tied electrical system, also called 'tied to grid' or 'grid tie system', is a semi-autonomous electrical generation or grid energy storage system which links to the mains to feed excess capacity back to the local mains electrical grid.

When insufficient electricity is generated, electricity drawn from the mains grid can make up the shortfall.

With the opportunity to feed back into the grid in certain areas, its a great opportunity to reduce your electricity consumption with your local provider.

Even though this is a simple cost effective way of reducing your cost, its shortfall lies in that should the utility supply shut down, your panels will not produce power during this period.

This is a safety feature built in to protect technicians while doing maintenance.

ROOF AREA 100-200 SQ.FT.	ROOF AREA 200-300 SQ.FT.	ROOF AREA 300-500 SQ.FT.	ROOF AREA 500-700 SQ.FT.	ROOF AREA 700-1000 SQ.FT.
SOLAMIO SOLAR SOLUTION -1	SOLAMIO SOLAR SOLUTION -2	SOLAMIO SOLAR SOLUTION -3	SOLAMIO SOLAR SOLUTION -4	SOLAMIO SOLAR SOLUTION -5
1 KVA Grid Tie Solar Inverter	2 KVA Grid Tie Solar Inverter	3 KVA Grid Tie Solar Inverter	5 KVA Grid Tie Solar Inverter	7 KVA Grid Tie Solar Inverter
4 nos. Modules of 255 Wp each	8 nos. Modules of 250 Wp each	12 nos. Modules of 250 Wp each	20 nos. Modules of 250 Wp each	28 nos. Modules of 250 Wp each
Bi-Directional Net Meter	Bi-Directional Net Meter	Bi-Directional Net Meter	Bi-Directional Net Meter	Bi-Directional Net Meter
Cables & Other Accessories	Cables & Other Accessories	Cables & Other Accessories	Cables & Other Accessories	Cables & Other Accessories
You Generate 1,460 units annually	You Generate 3000 units annually	You Generate 4,500 units annually	You Generate 7,500 units annually	You Generate 10,500 units annually

OFF GRID SOLAR POWER SYSTEMS

Independence is bliss!

Wish to stay completely independent? Invest in a Solar Off Grid Power System. These consist of high quality PV modules connected to fast charging batteries (C10 Type). DC power produced by the solar panels is fed into the solar inverter (PCU) which works by the following principles

1. Converts DC power to 230 V AC and supplies the day time loads directly to the house/office.

2. If there is no load at a particular time, the PCU will instead charge the battery bank (storage of power), usable after sunset.

3. In case of excess load or no solar power, the PCU can get the load supplemented from the Grid.

Advantages of Off-Grid Solar Systems

1. No access to the utility grid

Off-grid solar systems can be cheaper than extending power lines in certain remote areas.

Consider off-gird if you're more than 100 yards from the grid. The costs of overhead transmission lines cheaper

2. Become energy self-sufficient

Living off the grid and being self-sufficient feels good. For some people, this feeling is worth more than saving money.

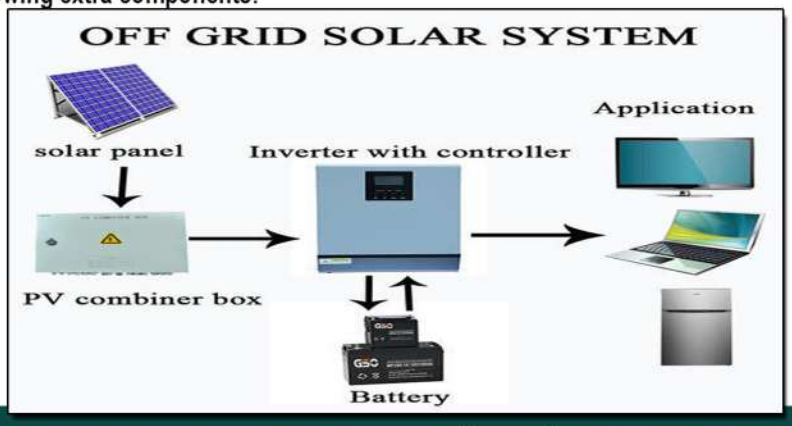
Energy self-sufficiency is also a form of security. Power failures on the utility grid do not affect off-grid solar systems.

On the flip side, batteries can only store a certain amount of energy, and during cloudy times, being connected to the grid is actually where the security is. You should install a backup generator to be prepared for these kinds of situations.

Equipment for Off-Grid Solar Systems

Typical off-grid solar systems require the following extra components:

- Solar Charge Controller
- Battery Bank
- DC Disconnect (additional)
- Off-Grid Inverter
- Backup Generator (optional)



Solar Charge Controller

Solar charge controllers are also known as charge regulators or just battery regulators. The last term is probably the best to describe what this device actually does: Solar battery chargers limit the rate of current being delivered to the battery bank and protect the batteries from overcharging.
Good charge controllers are crucial for keeping the batteries healthy, which ensures the lifetime of a battery bank is maximized. If you have a battery-based inverter, chances are that the charge controller is integrated.

Battery Bank

Without a battery bank (or a generator) it'll be lights out by sunset. A battery bank is essentially a group of batteries wired together.

DC Disconnect Switch

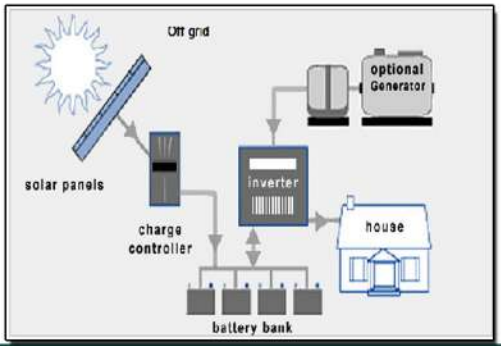
AC and DC safety disconnects are required for all solar systems. For off-grid solar systems, one additional DC disconnect is installed between the battery bank and the off-grid inverter. It is used to switch off the current flowing between these components. This is important for maintenance, troubleshooting and protection against electrical fires.

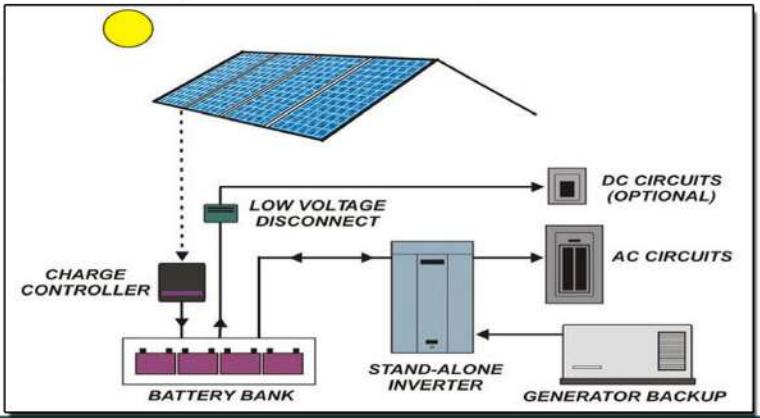
Off-Grid Inverter

There's no need for an inverter if you`re only setting up solar panels for your boat, your RV, or something else that runs on DC current. You will need an inverter to convert DC to AC for all other electrical appliances.
Off-grid inverters do not have to match phase with the utility sine wave as opposed to grid-tie inverters. Electrical current flows from the solar panels through the solar charge controller and the bank battery bank before it is finally converted into AC by the off-grid-inverter.

Backup Generator

It takes a lot of money and big batteries to prepare for several consecutive days without the sun shining (or access to the grid). This is where backup generators come in.
In most cases, installing a backup generator that runs on diesel is a better choice than investing in an oversized battery bank that seldom gets to operate at it`s full potential. Generators can run on propane, petroleum, gasoline and many other fuel types.
Backup generators typically output AC, which can be sent through the inverter for direct use, or it can be converted into DC for battery storage.





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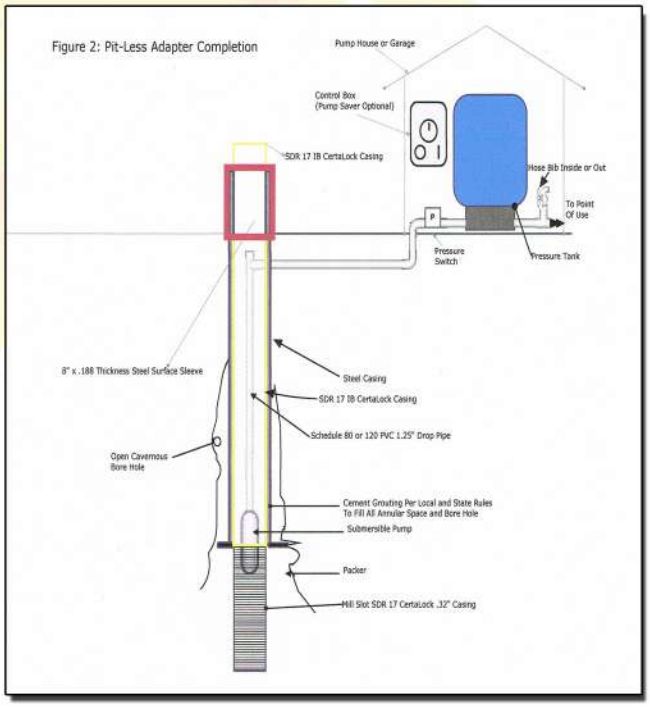
System Configuration- Load Wise

Sl no	System	System voltage	Solar PV Module	Solar PCU		Load	Battery Qty	Battery size &Backup		
				MPPT(KW)	INVERTER(KVA)			12 V 120 Ah	12 V 150 Ah	12 V 200 Ah
1	1 kw	24	325Wp x 3 nos	1 kw	1.25 kva	600w	2 nos	3.5 hrs	4.5 hrs	NA
						800w	2 nos	2.5 hrs	3 hrs	NA
						1000 w	2 nos	2 hrs	2.5 hrs	NA
2	2kw	48	325Wp X 6 nos	2 kw	2.5 KVA	1200 w	4 nos	3.5 hrs	4.2 hrs	NA
						1500 w	4 nos	2.75 hrs	3.5 hrs	NA
						2000 w	4 nos	2 hrs	2.5 hrs	NA
3	3 KW	48	325Wp X 9 nos	3 kw	3.75 KVA	2000 w	4 nos	2 hrs	2.5 hrs	**3.75 hrs**
						2500 w	4 nos	NA	2 hrs	**3 hrs**
						3000 w	4 nos	NA	1.75 hrs	**2.5 hrs**
4	4 KW	96	325Wp X 12 nos	4 kw	5 KVA	2500 w	8 nos	NA	4 hrs	NA
						3000 w	8 nos	3 hrs	3.25 hrs	NA
						4000 w	8 nos	2 hrs	NA	NA
5	5 KW	96	325Wp X 16 nos	5 kw	6.25 KVA	**3000 w**	8 nos	3.5 hrs	4 hrs	NA
						4000 w	8 nos	2.5 hrs	3 hrs	NA
						5000 w	8 nos	2 hrs	2.5 hrs	NA
6	6 KW	120	325Wp X 18 nos	6 kw	7.5 KVA	**4000 w**	10 nos	3.5 hrs	NA	NA
						5000 w	10 nos	2.5 hrs	3 hrs	NA
						6000 w	10 nos	NA	2.5 hrs	NA
7	8 KW	120	325Wp X 24 nos	8 kw	10 KVA	**5000 w**	10 nos	2.75 hrs	3.25 hrs	**3.75 hrs**
						6000 w	10 nos	2.25 hrs	2.75 hrs	**3 hrs**
						8000 w	10 nos	1.5 hrs	2 hrs	**2.3 hrs**
8	10 KW	180	325Wp X 32 nos	10 kw	12.5 KVA	**5000 w**	15 nos	3 hrs	5 hrs	NA
						7500 w	15 nos	2.25 hrs	3.25 hrs	NA
						10000 w	15 nos	NA	2.5 hrs	NA

SOLAR WATER PUMPING SYSTEM (UP TO 20HP)

The solar water pumping system uses solar energy to pump water. The system operates on power generated using solar PV (photovoltaic) system. The photovoltaic array converts the solar energy into electricity, which is used for running the motor pump set. The pumping system draws water from the open well, bore well, stream, pond, canal etc. The system requires a shadow-free area for installation of the solar panel.

Agricultural technology is changing rapidly. Farm machinery, farm building and production facilities are constantly being improved. Agricultural applications suitable for photovoltaic (PV) solutions are numerous. These applications are a mix of individuals installations and systems installed by utility companies when they have found that a PV solution is the best solution for remote agricultural need such as water pumping for crops or livestock. A solar powered water pumping system is made up of two basic components. These are PV panels and pumps. The smallest element of PV panel is the solar cell. Each solar cell two or more specially prepared layers of semiconductor material that produce direct current (DC) electricity when exposed to light. This DC current is collected by the wiring in the panel. It is then supplied either to a DC pump , Which in turns pumps water whenever the sun shines ,or stored in batteries for later use by the pump. The aim of this article is to explain how solar powered water pumping system works and what the differences with the other energy sources are.



Advantage

- No fuel cost- as it uses available free sun light
- No electricity required
- Long operating life
- Highly reliable and durable
- Easy to operate and maintain
- Eco-friendly

DC and AC solar pumping systems are specially designed for water supply and irrigation in remote areas where no reliable electricity supply is available.

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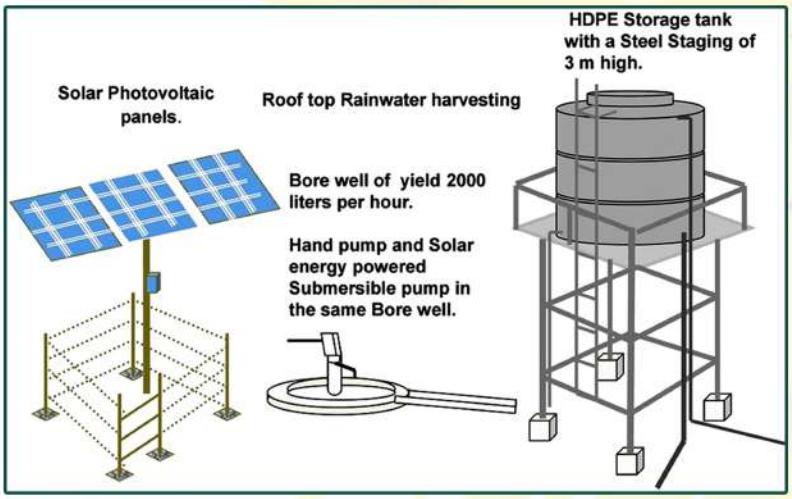
DC & AC pumping systems include:

- Solar module.
- Solar module mounting structure.
- DC/AC three phase inverter.
- Submersible, multi-stage centrifugal or helical type pump and motor combined in a stainless steel monobloc.
- All necessary cabling, piping, junction boxes and fixings.

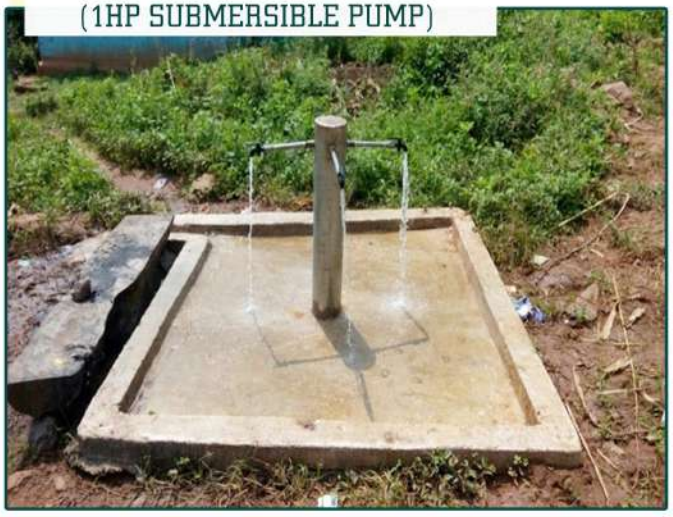
Features:
- Extremely long life
- Unattended operation
- Easy installation
- Very low maintenance
- Good quality water 24 hours a day

Applications:
- Crop irrigation
- Water for human consumption
- Water for livestock consumption



DRINKING WATER PROJECT
(1HP SUBMERSIBLE PUMP)

CROP IRRIGATION PROJECT



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Hybrid Solar Systems

A Hybrid electrical system, typicly has a connection to multiple sources of power. A Hybrid system consists of a Solar Aray, Inverter, grid tied connection with the option to connect to a generator also.

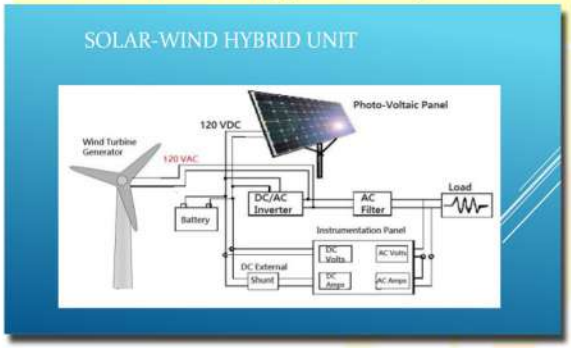
When insuf?cient electricity is generated, or the batteries are not fully charged, electricity drawn from the mains grid can make up the shortfall.

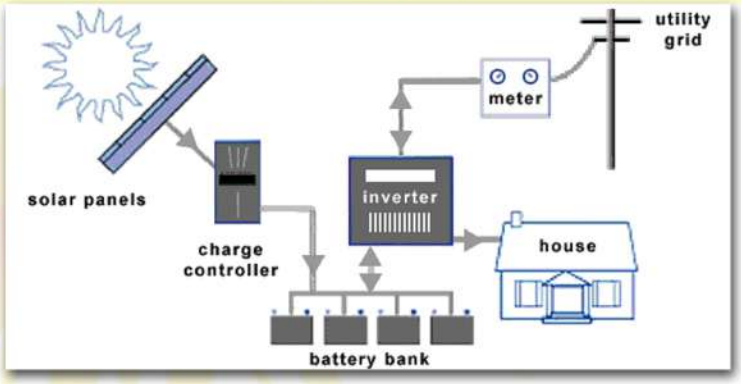
With the opportunity to feed back into the grid in certain areas, its a great opportunity to reduce your electricity consumption with your local provider.

Although a grid tied system does not allow you to consume power from your array during load shedding, a Hybrid system ensures connectivity at all times. Your system prioritises its supply by consuming what you produce ?rst, feeding excess into your batteries for charging and the balance it will tranfer into the grid.

Hybrid solar systems combines the best from grid-tied and off-grid solar systems. These systems can either be described as off-grid solar with utility backup power, or grid-tied solar with extra battery storage.

If you own a grid-tied solar system and drive a vehicle that runs on electricity, you already kind of have a hybrid setup. The electrical vehicle is really just a battery with wheels.





Advantages of Hybrid Solar Systems

1. Less expensive than off-gird solar systems

Hybrid solar systems are less expensive than off-grid solar systems. You don't really need a backup generator, and the capacity of your battery bank can be downsized. Off-peak electricity from the utility company is cheaper than diesel.

2. Smart solar holds a lot of promise

The introduction of hybrid solar systems has opened up for many interesting innovations. New inverters let homeowners take advantage of changes in the utility electricity rates throughout the day.

Smart solar holds a lot of promise. The concept will become increasingly important as we transition towards the smart grid in the coming years.

Equipment for Hybrid Solar Systems

Typical hybrid solar systems are based on the following additional components:

- Charge Controller
- Battery Bank
- DC Disconnect (additional)
- Battery-Based Grid-Tie Inverter
- Power Meter

Battery-Based Grid-Tie Inverter

Hybrid solar systems utilize battery ·based grid-tie inverters. These devices combine can draw electrical power to and from battery banks, as well as synchronize with the utility grid.

The bottom line is this: Right now, for the vast majority of homeowners, tapping the utility grid for electricity and energy storage is significantly cheaper and more practical than using battery banks and/or backup generators.

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SOLAR TELECOM SYSTEM

The Telecommunication industry is the perfect application for solar systems, where telecom equipment must be installed in the harshest of environments and remote areas, where no electricity is available. Solamio provides a complete turnkey solution to the telecom industry for the design, supply and installation of solar power systems tailored to customers' individual requirements.

Solar Control Centre (SCC)

The Solamio Solar Control Centre (SCC) is the latest state of the art controller specifically developed and produced for professional applications requiring the highest levels of performance. Fully expandable, enabling the SCC to grow in size in line with customers' expansion requirements. This is achieved through the addition of solid-state power switching modules depending on the solar/ load requirements. The microprocessor controlled charge controller will also provide comprehensive metering, logging and communications designed to provide the user with accurate digital information,clearly indicating the state of the solar modules and the battery.

Solar Modules

Solamio solar modules utilize the latest high efficiency crystalline solar cells. The solar cells are connected in series and are laminated between layers of tempered glass, EVA encapsulate and a Tedlar/ polyester backing, ensuring complete protection against the harshest of weather conditions. Please refer to page 5 for more details.

Features:

- Extra strong aluminum frame
- Easily mountable
- Easy field wiring (rear conjunction box)
- By-pass diodes for protection against damaging hotspots
- Qualified to IEC61215,TÜV and CE approvals.

Photovoltaic Storage Batteries

The Solamio STW and STG series of batteries are specifically designed for solar and telecommunication applications that require long lifetimes and reliability in cyclic operation. Solamio batteries, when installed within a Solamio approved system have a design life of over 15 years.

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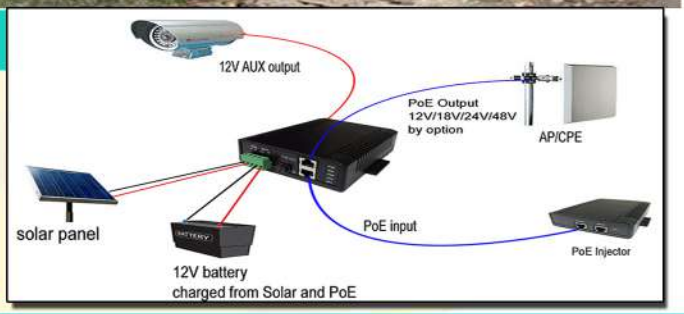
Dual Splitter Networks (redundancy)

The SDS (Solar Diode Splitter) and LDS (Load Diode Splitter) are used in systems with two SCCs and two battery banks to offer complete redundancy as a dual splitter network.



Solar Diode Splitter - SDS

The incoming solar feeds are taken to the Solar Diode Splitter. This incorporates a high power diode network, which allows current to flow to both SCCs and allows the output from the solar array to be used by both solar controllers. This system has the advantage of simplicity, and therefore reliability. There are no electromechanical parts to fail due to wear and tear, facilitating optimum battery life and system reliability.

Load Diode Splitter - LDS

The load outputs from both SCCs are taken to the Load Diode Splitter. This connects both SCCs to the load via a network of high power diodes. Load sharing is self-regulating between the SCCs. The system is simple and reliable, with no moving parts.

SiteWatch –internet based solar power monitoring system with remote access – a dramatic reduction in site visits.

Solamio Site Watch is a remote monitoring and data logging system which allows near real time monitoring of all remote solar power sites for every customer, regardless of where they are.It gives a constant indication of the status of all sites at a glance and highlights any warnings or problems as soon as they are detected.

Provided you have a higher level of permission for the system control, you can also make adjustments and control certain aspects of the remote solar power system so as to make further tests and take preventative action. You can access the data from any computer with internet connection with the added assurance of advanced security.

Solamio Site Watch also has a data logging feature. This enables collection, recording, analysis and display of information from the remote sites. This allows the site controller to check all systems are working at peak efficiency, calculating the return on investment, as well as predicting preventative maintenance plans.

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Weather monitoring

Solamio can design and supply a complete weather monitoring station. This can also include electrical and temperature measurements from a solar power system. The inputs are connected to a data logger for recording and building up records of weather patterns in remote locations. It can be used to verify performance of solar power systems and for future system design.

Support Structures

Solamio solar module structure provides the best economic solution. The ST ranges of support mounting structures can be designed to provide shading for positive cooling system or battery shelter and to secure the solar modules in position under extreme weather conditions.

Both fixed angles and adjustable types are available. The mounting structures are fabricated from hot rolled steel, hot dip galvanized to British Standard BS EN ISO 1461. The structures are designed to withstand wind speeds up to 200 km/h. This proven design is in operation around the world.

Features:

- Ideal for remote locations
- Low maintenance
- Expandable system
- Bespoke design
- Extreme temperature tolerant

Applications:

- Satellite communication and satellite internet terminals: VSATS
- Microwave repeaters
- GSM sites
- Fibre optics repeaters
- TV/FM stations
- rural communications

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SOLAR STREET LIGHT & GARDEN LIGHT SYSTEM

Light up your gardens, drive ways, terraces, construction sites and almost any other outdoor area with our self contained Solar Street Lights. The street lights switch on automatically at dusk and switch themselves off at dawn.

These consist of a solar panel, an LED luminaire, a small battery and a charge controller, all mounted on the same pole. The solar panel produces electricity during day time and keeps it stored in the battery which is later utilized to light up the luminaire through the night.

Solar street/garden lights are available in various luminaire sizes depending on the amount of light required by you. It is also customizable to different contemporary designs to ?t your required applications.

Solar Street Lights The Solamio range of street lighting systems is completely self contained, requiring no electricity line extensions. Also maintenance-free, making them ideal for locations where utility power is unavailable or uneconomic. Solamio designs and manufactures complete outdoor lighting systems inclusive of various lights, bulk heads, solar modules, solar charge controllers, batteries, and columns.

Features:

- No utility line extensions
- No utility bills
- Fast and simple installation
- Location flexibility
- Maintenance-free
- Automatic operation
- High reliability
- Long lifetime
- 2year warranty on systems
- 25 year warranty on solar module

Applications:

- Lighting of streets
- Markets
- Squares
- Car parks
- Bus stops
- rural roads
- roundabouts
- Crossings
- Footpaths
- Camp sites
- Beaches
- Service stations
- Highways and motorways

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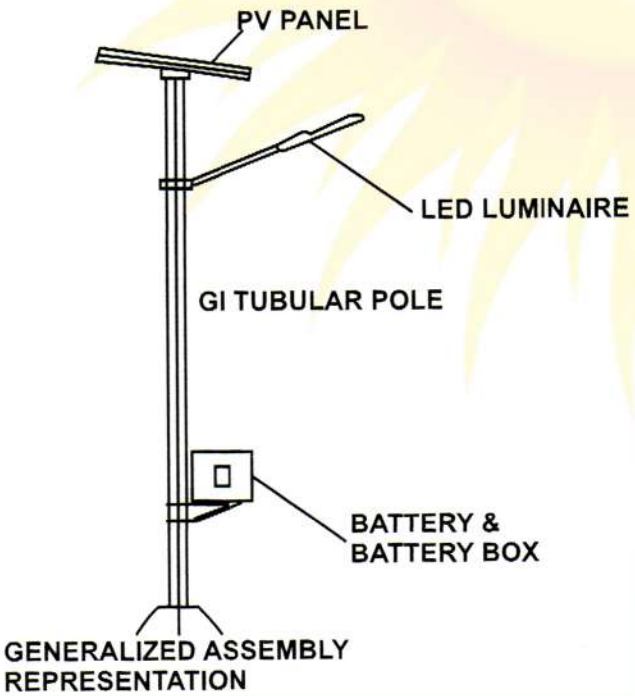
SOLAR STANDALONE LED STREET LIGHTING

- Solar standalone solar led street light system mention below includes LED Luminaire with In-built Solar Charge controller, Solar PV Module, Battery, Pole, Structure, wires and all required accessories for the complete product.
- For detailed PV Panel & Battery capacity , pole type and other details please refer product Catalogue.
- Bluetooth, RF and Hybrid Options are available on demand and at extra cost.
- Automatic inbuilt Dusk to Dawn controllable.
- Price mention here are with PWM based charge controller, MPPT Solar Charge Controller (SCC) are available on demand and at extra cost.
- Batteries consider here are LMLA (Low maintenance Lead Acid). VRLA GEL, Li-ion, LiFePO4 batteries options are available on demand and at extra cost.
- GI Tubular Pole consider here with Inground type mounting, WPB denoated as Tubular Pole with Base. 60W and above solar street light include 7 meter octagonal standard pole denoted as OCT. any change in pole type in existing system can vary the cost.
- Inbuilt Automatic dimming provided after dusk ON.
- PIR sensor can be added in some model on demand at extra cost.
- LED Street light consider in CCT 5700-6500K, however can be available in different CCT on demand.
- DA denoted Day Autonomy or battery back up considering battery charging as mention in product catalogue.
- WP denoted as With Pole and WOP as Without Pole.
- Any customization in product also available on demand and cost may vary accordingly.



GENERALIZED ASSEMBLY
REPRESENTATION

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SOLAMIO SOLAR

SOLAR ALL IN ONE LED STREET LIGHTING

- Solar Integrated led street light system mention below includes All in one integrated LED Luminaire with In-built Solar Charge controller , Solar PV Module, Battery and mounting clamp as complete product.
- For detailed PV Panel & Battery capacity , pole type and other details please refer product Catalogue.
- Bluetooth and Hybrid Options are available on demand and at extra cost.
- Automatic inbuilt Dusk to Dawn controllable.
- Price mention here are with PWM based charge controller, MPPT Solar Charge Controller (SCC) are available on demand and at extra cost.
- Batteries consider here are Li-ion and LiFePO4 batteries for different models, please refer product catalogue for the type of battery used in particular bproduct.
- Pole is not include in the price given here, however pole can be provided at extra cost.
- Inbuilt Automatic dimming provided after dusk ON however can be remove if not required.
- This product included inbuilt PIR Motion Sensor.
- LED Street light consider in CCT 5700-6500K, however can be available in different CCT on demand.
- For Autonomy or battery back up please refer product catalogue.
- WP denoted as With Pole, WOP as Without Pole and OCT as Octagonal pole.
- Any customization in product also available on demand and cost may vary accordingly.

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SOLAMIO SOLAR

SOLAR FENCING

Solar Fence can be built alongside existing fences except in case of barbed wire fences.

1. Existing posts can be made use of provided the corner / end poles are strong.
2. The shock does not physically harm animals or human beings.
3. The Solar Electric Fence System conforms to National and international Standards.
4. The Solar Energizers are tested by ETDC, Govt. of India.

Features

1.Fence posts are erected 6 – 8 mtr apart depending upon the terrain.
2.No barbed wires are used. Only plain High tensile (Strong) wire is used.
3.A long life as the fence is not subjected to physical pressures of wear and tear.
4.Selective barriers possible. For example, Elephant barriers can be designed to allow smaller animals like cattle to move in and or out.
5.It is used in more than 165 countries all over the world.
6.It is the most effective method of fencing, and is safe to all kinds of animals and to human beings.
7.It is easily constructed and maintained.
8.It is long lasting and can be modified, extended, shifted and re-erected from one place to another, without loss of materials and waste of
labour.
9.This is the only method of fencing, which can effectively keep all kinds of wild animals out.
10.It is not dependent on regular electricity supply as it operates on battery.

Very effective system

It provides round-the-clock vigilance. The system provides a sharp but safe electric shock when touched, activates an audio-visual alarm when tampered with and indicates visually in which zone the intrusion is taking place. The system can be integrated subject to fulfillment of conditions with floodlighting and CCTV to augment the security at the perimeter.

Reduction in Man Power

Existing security personnel deployed to man the perimeter can be reduced and redeployed for better assignments.

Highly Reliable

The system is devoid of any false alarms. The system can be designed to meet any specific level of security needs.

Very little maintenance

Excessive calibration is not required. Ongoing cost of maintenance is negligible.

Power consumption

Each control unit consumes 25W of power – approximately 0.5 unit a day. With option of Solar Power, the system can be effectively used in remote areas without power availability.

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SOLAR WATER HEATING SYSTEM

Solamio Solar has been a leader in Solar FPC Water Heating Systems for more than two decades. Our cutting edge manufacturing & service of the Flat Plate Collectors (Copper, Aluminium) ensure the highest quality and hence the highest output. We at Solamio Solar have installed more than 46 lakh liters of hot water systems over the years. Solar Water heaters have a variety of applications from small domestic systems to large community water heaters for housing societies, from hotels to hospitals. We have a variety of different systems in almost all possible capacities - Regular systems, Day Night systems, Pressurized systems, etc. Regular Water Heaters v/s Day-Night Series?

Whats the difference?

All regular Solar Water Heaters based on the natural ?ow (thermo-syphon) principle suffer from a typical drawback that is the mixing of cold & hot water. Unless cold water is fed into hot water tank, hot water cannot be removed for use. This means that as you remove hot water for use, cold water enters the hot water tank and mixing occurs. In our 'DayNite'thermo-syphon solar heater this problem of mixing of hot & cold water has been addressed and minimized to a very large extent by the use of buffered hot water tanks. This model is a modular, 'add-on' type which means the hot water capacity can be enhanced at a later date by adding on another unit, without either disturbing the original unit or discarding any component (unlike other available solar water heaters).

- » 5* years warranty
- » Special Steel Guard Lining with Epoxy Marine Triple coated inner tank
- » Special three layer glass tube
- » Special stand and structure without welding
- » Pressurize system available
- » 24 hours Hot Water any time any where

ETC WATER HEATING SYSTEMS

Cheap and effective!

One of the newest entrants in solar products, the Evacuated Tube Collector system is the low budget answer to heating water. These systems are available in various capacities starting from 100 Litres per day..

These are considerably lower in cost than FPC water heating systems but are also fragile in comparison. The blue glass tubes are also quite the eye catcher

SOLAMIO Advantage and Inovation

After sales service | End to End Solution | Quick Installation | Experienced Team | Unique Remote Monitoring System | Warranty | Subsidy | Financing

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SOLAMIO SOLAR

Tank :

• Special Steel Guard Lining with Epoxy Marine Tripple coated inner tank specially designed for pressure pump.

• Ultra Conductive & Ultra Thermal with Ultrasonic Welded collectors.

• High Density PUF Insulation keeps Water Hot 24 Hours.

Advantages :

• Invested Money Payback time 2 to 3 Years.

• 24 Hours Hot Water – Any Time Any Where.

• Saves Electrical Energy so Saves Money too.

• Widely accepted since last 15 years.

• Range of Capacity 100 to 500 LPD (Liters Per Day)

Application : • Residential, Hotels, Hospitals, Restaurants, Commercial, Swimming Pool, Industrial.

SOLAMIO SOLAR

Type: A

Total Capacity of the system - 100 LPD Solar Water Heating System
Number of PERSONS to use - 03 Persons

100 LPD Solar Water Heating System Specifications For 01 System	
Number of solar flat plate collectors required	01
Collector Type	COPPER with Chrome Coated
Collector dimensions (per collector)	2. 066 M2 2120 * 1040 * 100 mm (+/- 10 mm)
Total Space required for the Collector	2. 066 M2
Space required for hot water insulated Tank	1 M2
Collector weight (per collector)	47. 5 Kg
Total Collector Weight for the System	47. 5 Kg
Solar insulated hot water tank capacity	100 LPD
Minimum temperature of heated water	Around 75 degree Celsius
Type of hot water storage tank	Graded Stainless Steel
Electrical Back-up	2 KW

Type: B

Total Capacity per system - 200 LPD Solar Water Heating System
Number of PERSONS to use - 06 Persons

200 LPD Solar Water Heating System Specifications For 01 System	
Number of solar flat plate collectors required	02
Collector Type	COPPER with Chrome Coated
Collectors dimensions (per collector)	2. 066 M2 2120 * 1040 * 100 mm (+/- 10 mm)
Total Space required for the Collector	4. 132 M2
Space required for hot water insulated Tank	1 M2
Collector weight (per collector)	47. 5 Kg
Total Collector Weight for the System	95 Kg
Solar insulated hot water tank capacity	200 LPD
Minimum temperature of heated water	Around 75 degree Celsius
Type of hot water storage tank	Graded Stainless Steel
Electrical Back-up	2 KW

Type: C

Total Capacity per system - 300 LPD Solar Water Heating System
Number of PERSONS to use - 12 Persons

300 LPD Solar Water Heating System Specifications For 01 System	
Number of solar flat plate collectors required	03
Collector Type	COPPER with Chrome Coated
Collectors dimensions (per collector)	2. 066 M2 2120 * 1040 * 100 mm (+/- 10 mm)
Total Space required for the Collector	6. 198 M2
Space required for hot water insulated Tank	1. 5 M2
Collector weight (per collector)	47. 5 Kg
Total Collector Weight for the System	142. 5 Kg
Solar insulated hot water tank capacity	300 LPD
Minimum temperature of heated water	Around 75 degree Celsius
Type of hot water storage tank	Graded Stainless Steel
Electrical Back-up	3 KW

Type: D

Total Capacity per system - 500 LPD Solar Water Heating System
Number of PERSONS to use - 20 Persons

500 LPD Solar Water Heating System Specifications For 01 System	
Number of solar flat plate collectors required	04
Collector Type	COPPER with Chrome Coated
Collectors dimensions (per collector)	2. 066 M2 2120 * 1040 * 100 mm (+/- 10 mm)
Total Space required for the Collector	8. 264 M2
Space required for hot water insulated Tank	2 M2
Collector weight (per collector)	47. 5 Kg
Total Collector Weight for the System	190 Kg
Solar insulated hot water tank capacity	500 LPD
Minimum temperature of heated water	Around 75 degree Celsius
Type of hot water storage tank	Graded Stainless Steel
Electrical Back-up	4 KW

Type: E

NON - DOMESTIC SOLAR WATER HEATING SYSTEM
Total Capacity per system - 1000 LPD Solar Water Heating System
Number of PERSONS to use - 40 Persons

1000 LPD Solar Water Heating System Specifications For the System	
Number of solar flat plate collectors required	08
Collector Type	COPPER with Chrome Coated
Collectors dimensions (per collector)	2. 066 M2 2120 * 1040 * 100 mm (+/- 10 mm)
Total Space required for the Collector	16. 528 M2
Space required for hot water insulated Tank	4 M2
Collector weight (per collector)	47. 5 Kg
Total Collector Weight for the System	380 Kg
Solar insulated hot water tank capacity	1000 LPD
Minimum temperature of heated water	Around 75 degree Celsius
Type of hot water storage tank	Graded Stainless Steel
Electrical Back-up	8 KW

Type: F

NON - DOMESTIC SOLAR WATER HEATING SYSTEM
Total Capacity per system - 5000 LPD Solar Water Heating System for plate washing of 300nos

5000 LPD Solar Water Heating System Specifications For the System	
Number of solar flat plate collectors required	40
Collector Type	COPPER with Chrome Coated
Collectors dimensions (per collector)	2. 066 M2 2120 * 1040 * 100 mm (+/- 10 mm)
Total Space required for the Collector	82.64 M2
Space required for hot water insulated Tank	8 M2
Collector weight (per collector)	47. 5 Kg
Total Collector Weight for the System	1900 Kg
Solar insulated hot water tank capacity	2500 LPD x 2nos
Temperature of heated water	Around 75 degree Celsius
Type of hot water storage tank	Graded Stainless Steel
Electrical Back-up	20 KW

COSTOMIZED SOLUTIONS

SOLAR MICRO-GRID SYSTEM

Empowering to the remote locations through solar micro-grid system for a better future.

Solamio Solar provides custom solutions to power remote regions that might be cut off from regular electric grids. Installing micro-grids in such areas ensures access to green & clean power.

HOW DOES A SOLAR MICRO-GRID WORK ?

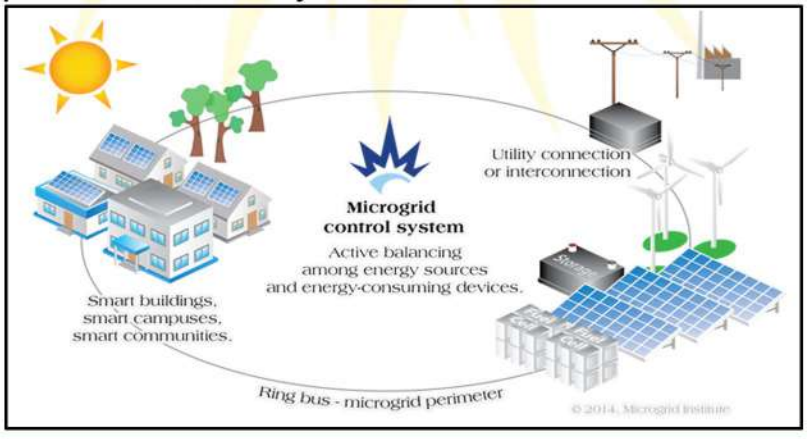
1-All solar PV panels connected in the array generate electricity by converting solar radiation into electrical energy.

2.The electricity generated from the array of panels is transmitted to a central controller called the Power Conditioning Unit (PCU).

3.The PCU controls, regulates and directs the electrical energy transmitted from the array, and supplies electricity directly to homes, shops, offices, street lights etc.

4.During the day, if the power generated is not used or surplus power is generated, the PCU directs this to the battery bank which stores power. This power can then be used at night (after the sun sets).

The micro-grid and battery bank are connected to a computer for local power usage monitoring. With addition of a modem, this information can be accessed from a remote locations, eliminating the need for local manpower to monitor the systems



SOLAR RO SYSTEMS

solar water purifier

Do you know 25% of the Indian population is not grid-connected and an additional 30% with limited connectivity?

A solar powered RO (Reverse Osmosis) and UF (Ultra Filtration) plant is a boon for rural India since it makes safe drinking water available without dependency on intermittent / no electricity connectivity. A solar powered water purifier solution can help provide latest water cleansing technologies in remote and rural India.

Advantages of Solar Powered RO Systems

Our solar powered water purifier systems are designed to run with / completely independent of electricity supply as compared to typical water pumps that run on diesel or grid, or both.
Our solutions use the latest technologies of RO or UF for multiple input water quality ranges.
We offer automatic as well as manual water dispensing options.

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SOLAR HOME LIGHTING SYSTEMS

HOME SOLUTIONS

Complete solar solutions comprising of solar panels, solar UPS and C10 rated solar batteries. Ideal for homes and small shops.

- Simultaneous charging from mains & solar with priority to solar
- Battery charging commences at 110 Volt mains voltage
- Inbuilt protection from reverse polarity & reverse current
- Inbuilt protection from short-circuit, over-charge and deep discharge
- Pure sine wave output from UPS (except NXG 350)
- Best in class conversion ef?ciency of solar panels
- Flexibility to use different types of batteries

Home Solution			Peak Load	Backup Time (hours)*	Minimum Roof Area Required	Monthly Generation (KWh)
UPS in VA	PV Panel	Battery				
350	2 x 100 Wp	75 Ah	1 Fan, 5 LED lights, 1 TV and 1 Mobile Charger	7-8	20 sq. ft.	14-28
750	1 x 100 Wp	100 Ah	2 Fans, 3 LED lights, 1 tube light, 1 TV and 1 Mobile Charger	6-7	10 sq. ft.	7-14
	4 x 100 Wp	150 Ah	2 Fans, 3 LED lights, 1 tube light, 1 TV and 1 Mobile Charger	10-11	40 sq. ft.	28-56
1100	1 x 150 Wp	120 Ah	3 fans, 4 LED lights, 3 Tube lights, 1 TV and 1 Mobile Charger	4-5	15 sq. ft	11-21
	4 x 150 Wp /6 x 100 Wp	150 Ah	3 fans, 4 LED lights, 3 Tube lights, 1 TV and 1 Mobile Charger	5-6	60 sq. ft.	42-85
1400	1 x 150 Wp	120 Ah	4 fans, 6 LED lights, 4 Tube lights, 2 TVs and 1 Mobile Charger	2-3	15 sq. ft.	11-21
	5 x 150 Wp	150 Ah	4 fans, 6 LED lights, 4 Tube lights, 2 TVs and 1 Mobile Charger	3-4	75 sq. ft.	53-106
1800	1 x 250 Wp	2 x 120 Ah	4 fans, 4 LED lights, 3 Tube lights, 1 TV, 1 motor & 1 mobile Charger	4-5	25 sq. ft	18-35
	4 x 250 Wp/ 8 x 150 Wp	2 x 150 Ah	4 fans, 4 LED lights, 3 Tube lights, 1 TV, 1 motor and 1 Mobile Charger	6-7	100 sq. ft.	70-140

Above solutions are few possible examples. Other configurations are possible The values mentioned are approximate based on standard test conditions. Actual results may vary.

HOME UPGRADE SOLUTIONS

Solar solutions to upgrade your existing UPS to solar. Ideal for existing UPS users who want to upgrade to solar with minimum investment

- **Solar optimization technique maximizes solar usage**
- **Three operational modes– auto, charger (manual) and 100% solar (manual)**
- **Inbuilt protection from reverse polarity & reverse current**
- **Inbuilt protection from short-circuit, over-charge and deep discharge**
- **Best in class conversion ef?ciency of solar panels**
- **Flexibility to use different types of batteries**

Existing Installation		Solution		Minimum Roof Area Required	Monthly Generation (KWh
UPS in VA	Battery	PWM SOLAR CHARGE CONTROLLER	PV Panel		
500 /12V	120 Ah	20 -40amp	1 x 150 Wp	15 sq. ft.	11 - 21.
	150 Ah	20 -40amp	4 x 100 Wp	40 Sq. ft.	28-56
850 /12V	120 Ah	20 -40amp	1 x 150 Wp	15 sq. ft.	11 – 21
	150 Ah	20 -40amp	4 x 100 Wp	40 sq. ft.	28-56
1100 /12V	120 Ah	20 -40amp	1 x 150 Wp	15 sq. ft.	11 – 21.
	150 Ah	20 -40amp	4 x 100 Wp	40 sq. ft	28-56
1500 /24V	2 x 120 Ah	20 -40amp	2 x 100 Wp (24V)	20 sq. ft.	14 - 28
	2 x 150 Ah		4 x 250 Wp	100 sq. ft.	70 -140

DC SOLUTIONS

Solar solutions for DC applications comprising of solar panels, batteries and charge controllers. Ideal for places where grid power is unavailable or negligible.

- **PWM based controllers with up to 98 % ef?ciency**
- **Fuse less software controlled protections**
- **Automatic selection of 12V/24V battery – no manual operation**
- **Option of SMF and Lead Acid battery type selection**
- **Best in class conversion ef?ciency of solar panels**

DC SOLUTIONS			Peak Load	Backup Time	Minimum Roof Area Required
Charge Controller	PV Panel	Battery			
20-50 amp	40 Wp	20 Ah	1 DC Fan and 1 LED lights	6-7	4 sq.ft.
	40 Wp	40 Ah	1 DC Fan and 2 LED lights	5-6	4 sq.ft.
	75 Wp	40 Ah	2 DC Fans, 2 LED lights and 1 Mobile Charger	6-7	7.5 sq.ft.
	75 Wp	75 Ah	2 DC Fans, 2 LED lights and 1 Mobile Charger	4-5	7.5 sq.ft.
20-50 amp	100 Wp	75 Ah	2 DC Fans, 2 LED lights, 1 TV and 1 Mobile Charger	3-4	10 sq.ft.
	150 Wp	100 Ah	2 DC Fans, 2 LED lights, 1 TV and 1 Mobile Charger	5-6	15 sq.ft.
20-50 amp	150 Wp	120 Ah	2 DC Fans, 2 LED lights, 1 TV and 1 Mobile Charger	6-7	15 sq.ft.

SOLAMIO
Solar brings the smile...

Indicative Projects Completed by SOLAMIO











SOLAMIO
Solar brings the smile...

" It is really cool to have a solar panel on your roof , to produce your own electricity "

Bill Gates

SOLAMIO
Solar brings the smile...

Indicative Projects Completed by SOLAMIO

"The future of this planet is in Green , Renewable and Sustainable Energy"

Arnold Schwarzenegger

OUR CLIENTS & PRODUCT PARTNER

Long life of 30 years

Payback on your investment in 3-5 years

Durable

Save drastically

Go Green/ Environmental Benefits

Subsidy available for non-commercial customers

SOLAMIO SOLAR

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