# AEGASUN® Solar Power Systems



Are you fed up with high electricity bills?
Or frequent power cuts?

AEGASUN Energy has the solution!!

Guaranteed Energy Generation

Door step Services Power cost <Rs. 2/unit over 20Yr

Payback in as low 3 years

Finance Option



Demand for electricity is increasing every day with improvement in standard of living and also increase in population. Our daily use of Electrical Energy from conventional sources also results in production of a lot of green house gases and pollution. Although solar energy is available in abundance in most part of the world, electricity is still scarce or costly for many. We have therefore focused in harnessing the energy of SUN, the universal source of Renewable Energy for use in every sphere of life.

AEGASUN® offers a range of customised solar PV installations from concept and design to commissioning for residential, commercial and industrial applications. These installations can be designed based on the need of the customer and installed at site by our experts. The scope will include system design, material specification, plant layout, supply of components, system integration / installation and commissioning. Typically, a shadow free space of about 10 Sq. M is required per kW of solar panels.

We use components for our solar inverters from world leaders in the field. Coupled with optimum structure design and high efficiency international quality solar panels our systems offer high energy yield for a given solar insolation.

#### Features of AEGASUN® Range of Solar Power Systems

- Ideally suited for applications for Homes, Schools, Colleges, Community Centres, Commercial Offices, Construction Companies,
  - Hotels, Hospitals, Petrol Pumps etc.
- Automatic balancing of energy supply from Solar and shortfall from Grid
- Advanced Microprocessor for improved performance.
- High efficiency inverter operation
- LCD display to indicate power source, power output, energy Generation
- Provides stable and reliable power
- MNRE approved Solar Photo Voltaic (PV) panels with IEC 61215, IEC 61730 & IEC 61701, IEC 60068-2-52, UL 1703 Certifica™ion



#### **★lectroSvy** TM Solar Power Packs (SPP): Off-grid Systems

Solar Power Packs are compact systems which can run any electrical household or office equipment. These systems are normally available with battery backup, work like an inverter and give you freedom from power cuts. They give priority for solar, which means they will first consume the energy generated from solar and in absence or lack of Sunlight will automatically switch over to battery power followed by grid.

The battery discharge level can also be set depending on power to be reserved for emergency use. Excess solar power, which is available after catering to day time load, is used to charge the battery. Hybrid systems can also be provided with grid feeding facility for areas with Net Metering policy. ElectroSun SPPs come in a range from 450VA to 5KVA in 1 Phase.

#### AEGASUN <sup>®</sup> Solar Roof Top Power Plants (RTP): Grid-tied Systems

Rooftop Power Plants are normally grid tied (without battery) and operate on a larger scale than SPPs. They are synchronized with Grid / DG power for uninterrupted availability of Power. Normally, RTPs are very useful for housing societies / projects, commercial establishments and industries where there is adequate day time load or at least net metering facility. At night, when there is no sunlight and hence no generation, load runs on grid power. Solar panels can be mounted on roof or ground depending on site condition.

AEGASUN® Grid-tied Rooftop Solar Plants range is available from 1.5kW to 5kW in 1 phase and 5kW upwards upto MW scale in 3 phase.

#### Features:-

- Quality of Solar Power voltage, frequency matches that of Grid
- Excess generation is fed to the grid
- Multifunction LCD display to Indicate various parameters of solar power
- Provides stable and reliable power
- Economical compared to Off-grid systems
- Easy to maintain

#### **Net metering**

This is a billing mechanism that credits solar energy system owners for the electricity they add to the grid.

If at any moment of time, the solar energy generation (kWh) is less than the load requirement at that time, the difference of energy is taken from the grid as usual. In this case, the system owner is charged for the units (kWh) consumed / imported from the grid. However, if at any moment of time, the solar energy generation (kWh) is more than the load requirement at that time, the excess solar energy is fed into the grid and the system owner gets credit for the units (kWh) exported to the grid. The measurement of such import and export is done in a Bidirectional meter provided by the Electricity Utility (Discom). The consumer pays for the net energy consumed i.e. drawn / imported from the grid less exported to the grid.

#### **Benefits of Grid Tied Solar PV Power Plant with Net Metering:**

- There is no need to store energy in Batteries for use at night, hence the system is cheaper, more efficient and requires very less
  - maintenance
- Depending on Utility Energy cost, Investment is paid back in approx. 2 to 5 years
- Easy to add capacity in future
- Plant capacity need not match the load

#### Applications for Off-grid and Grid-tied Systems

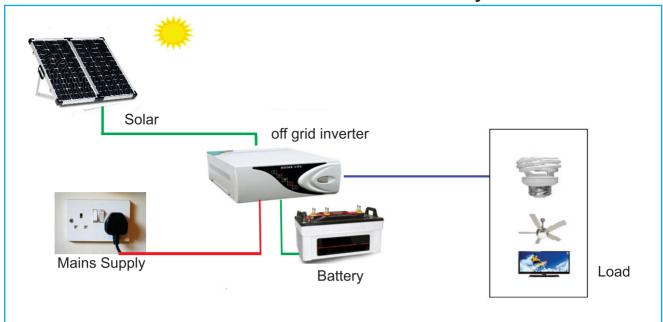
Sr. No.	Application Areas	Off-Grid	Grid-tied
1	High Electricity Tariff	Suitable	Most Suitable
2	Scarcity / Non-availability of power	Suitable	Not suitable
3	High Load Requirement	Less Suitable	Most Suitable
4	Very High Intermittent Load	Not suitable	Most suitable
5	Payback Period	Longer	Shorter
6	Maintenance	Low	Very Low
7	Cost of Plant	Higher	Lower
8	Energy Generation	Lower	Higher
9	Suitable for Net Metering	No	Yes
10	Night Working	Power available from Battery	Power available from Grid



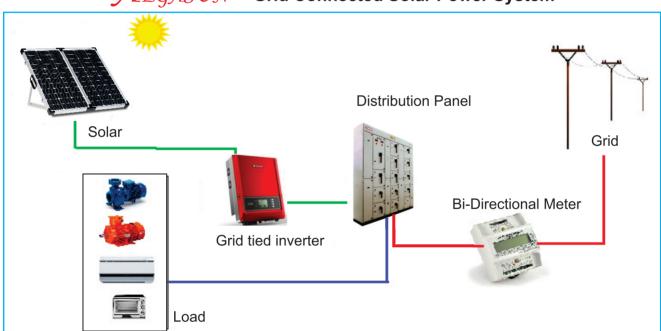




### **<b>∠**lectro**S***vy* <sup>TM</sup> Off Grid Solar Power System



### $\mathcal{A}_{EGASUN}$ $^{ ext{ iny R}}$ Grid Connected Solar Power System



## ${\cal A}$ E ${\cal G}$ A ${\cal S}$ U ${\cal N}$ Energy LLP:

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