

## Our Profile

I Power Solutions is the Core Company of ICON Automation Since April 2004 also presently a Channel partner of Mitsubishi Factory Automation Products.

I Power Solutions is detach for Power Projects with member of have decade of experience and Expertise in Solar industries both technical and Marketing milieu for Grater than 15years.

## Our Vision

To Become Greatest Leader in Renewable Energy sector by 2020

To provide the High Technology based Solar systems to Domestic, Institution and Industrial sectors.

## Our Mission

To provide the quality products and solutions with cost effectiveness, timely delivery and total customer satisfaction to achieve the goal.

To Provide the fast redrssal services after the Delivery

To Provide the Professional Power solutions for our customers such as institutions, Domestic and Industries Purpose Etc.,

## Our Strength

- Engineers are well qualified with professional background.
- Superior and high quality service
- High performance and cost effective solutions
- Excellent and committed team
- Strong strategic alliances
- Project completion in committed time
- Reliable post implementation back up support
- The engineers are constantly upgraded by us so as to keep pace with the growing needs of the industry
- Dedicated team of engineers with minimum individual experience over 3 yrs in the field of Industry.

I Power Solutions with its wide experience and thorough understanding of the customer needs is better positioned to deliver a good working and cost effective solution. The most important driving force behind our success is we care for our customers and we deliver solutions that are highly valued by our customers.

Since the inception of our organization, we have nurtured Customer Orientation and Technical updating as the fundamental objectives of our Engineers. We have the right blend of customer orientation and technical skills, which are duly acknowledged by our customers.



## Introduction:

This is an initial proposal and all information is subject to change based on site requirements and detailed Engineering document. Please contact us for any more information and Clarifications. We look forward for your long lasting Business relationship and we are committed to deliver high quality service & standards to our clients.

## Solar Photovoltaic's:



Solar Photovoltaic (PV) is a method of converting solar irradiation in to direct current electricity using semiconductor that exhibit the Photovoltaic Effect. Photovoltaic power generation employs solar panels composed of a number of solar cell containing a photovoltaic material.

Materials presently used for photovoltaics include monocrystalline silicon, poly crystalline, silicon, amorphous silicon, Cadmium Telluride (CdTe) and copper indium gallium selenide/sulfide (CIGS) Due to the growing demand for renewable energy sources, the manufacturing of solar cells and photovoltaic system has advanced considerably in recent years.

Solar photovoltaic is growing rapidly, albeit from a small base, to a total global capacity of 69 GW at the end of 2011. The total power output of the world's PV capacity run over a calendar year is equal to some 80 billion kWh

of electricity. This is sufficient to cover the annual power supply needs of over 20 million households in the world.

Driven by advances in technology and increases in manufacturing scale and sophistication, the cost of photovoltaic's has declined steadily since the first solar cells were manufactured and the liveliest cost of electricity (LCOE) from PV is competitive with conventional electricity sources in an expanding list of geographic regions. Net Metering and financial incentives, such as preferential feed-in tariffs for solar-generated electricity, have supported solar PV installations in many countries. With current technology, photovoltaic's recoup the energy needed to manufacture them in 1 to 4 years.

## Why Solar??

While a majority of the world's current electricity supply is generated from fossil fuels such as coal, oil and natural gas, these traditional energy sources face a number of challenges including rising prices, security concerns over dependence on imports from a limited number of countries which have significant fossil fuel supplies, and growing environmental concerns over the climate change risks associated with power generation using fossil fuels. As a result of these and other challenges facing traditional energy sources, governments, businesses and consumers are increasingly supporting the development of alternative energy sources and new technologies for electricity generation. Renewable energy sources such as solar, biomass, geothermal, hydroelectric and wind power generation have emerged as potential alternatives which address some of these concerns. As opposed to fossil fuels, which draw on finite resources that may eventually become too expensive to retrieve, renewable energy sources are generally unlimited in availability.

Solar power generation has emerged as one of the most rapidly growing renewable sources of electricity. Solar power generation has several advantages over other forms of electricity

## Generation:

**Reduced Dependence on Fossil Fuels.** Solar energy production does not require fossil fuels and is therefore less dependent on this limited and expensive natural resource. **Environmental Advantages.** Solar power production generates electricity with a limited impact on the environment as compared to other forms of electricity production.

**Matching Peak Time Output with Peak Time Demand.** Solar energy can effectively supplement electricity supply from an electricity transmission grid, such as when electricity demand peaks in the summer. **Modularity and Scalability.** As the size and generating capacity of a solar system are a function of the number of solar modules installed, applications of solar technology are readily scalable and versatile.

**Government Incentives.** A growing number of countries have established incentive programs for the development of solar and other renewable energy sources, such as (i) net metering laws that allow on-grid end users to sell electricity back to the grid at retail prices, (ii) direct subsidies to end users (iii) low interest loans for financing solar power systems and tax incentives; and (iv) government standards that mandate minimum usage levels of renewable energy sources.

## System Configuration:

Basic components for grid connected system

Solar PV module

Hybrid Solar Inverter

Structures







## Reference Projects

### Completed Projects

- 10MW Ground mounted Project Both AC & DC works – Bhangnapalli, AP, (Client Welspun)
- 3.5MW Rooftop Project Both AC and DC side at Saint Gobian glass Company (Client –Anchor Panasonic)
- 500Kw Roof top Solar Project – Nila sea foods – Tuticorin
- 10MW SolarGround Mounted Project (DC work), Pulivendula, AP (Client – Welspun)
- 1.3 MW Ground Mounted DC work at Virudhunagar, Madurai (Client – Manikaran Solar)

### Ongoing Projects

- 20KW Hybrid roof top Solar – Assam Bhavan(A Govt of ASSAM), Vellore.

**150kW PROJECT**  
Bangalore, India



**350kW PROJECT**  
Tamil Nadu, India



**5MW PROJECT**  
Tamil Nadu, India



**400kW PROJECT**  
Tamil Nadu, India



**900 KW PROJECT**  
Karnataka, India



**2.5MW PROJECT**  
Rajasthan, India





### 3.5 MW Rooftop Solar Project at SaintGobian Srierumpthur



## Contact us

T.Janarthanan,

I Power Solutions

No.17 Gurunanesh Nagar, Adhanur,

Guduvanchery, Chennai -603202.

Mobile - 9710039244. 7299661222.

Email - [info@ipowersolutions.co](mailto:info@ipowersolutions.co)

[ipowersolutions2018@gmail.com](mailto:ipowersolutions2018@gmail.com).

Website- [www.ipowersolutions.co](http://www.ipowersolutions.co)

