

*“Our Universe is a sea of energy, free clean energy. It is out there waiting for us to set sail upon it”  
--- Robert Adams*

## ABOUT US

Imperial Solar Solutions is a system integrator of all types of solar products and solutions. Within a short span of time ISS has been successful in establishing itself as a reputed system integrator providing all types of solar based energy efficient solutions to government, commercial and domestic sectors in Eastern India. Materials supplied by us are equipped with the most modern technologically driven machineries operated with highly efficient and experienced technicians. Dealing with government approved products, ISS core competency lies in supplying of all types solar products like: **Solar Power Plants, Solar Street Lights, Solar Water Heaters & Solar Home Lighting Systems.**

Apart from solar products and solutions, ISS also provides total solutions / concepts for implementation of **energy efficient systems with LED lights** in domestic, commercial and industrial sectors.

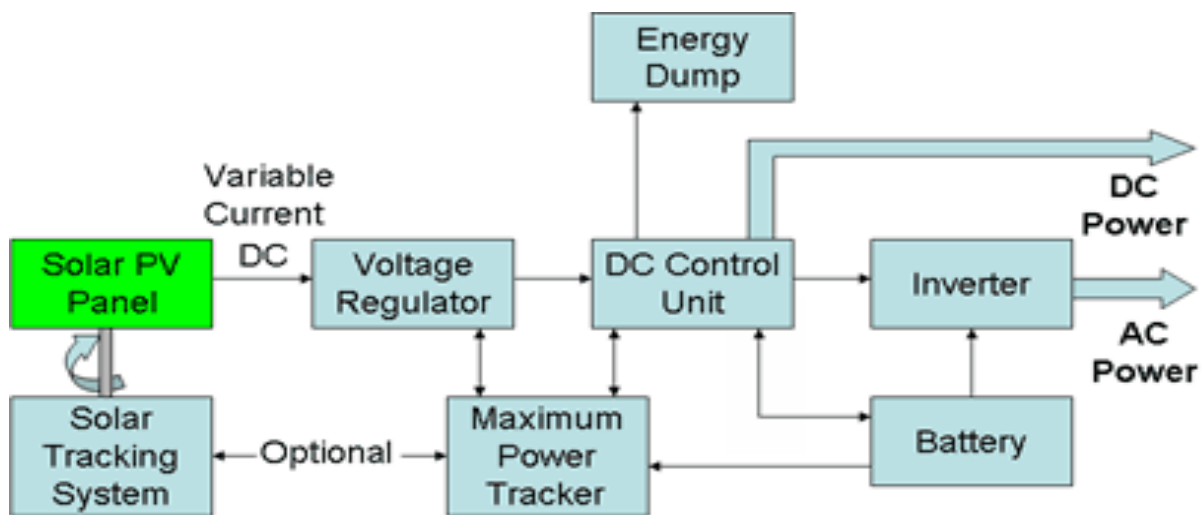
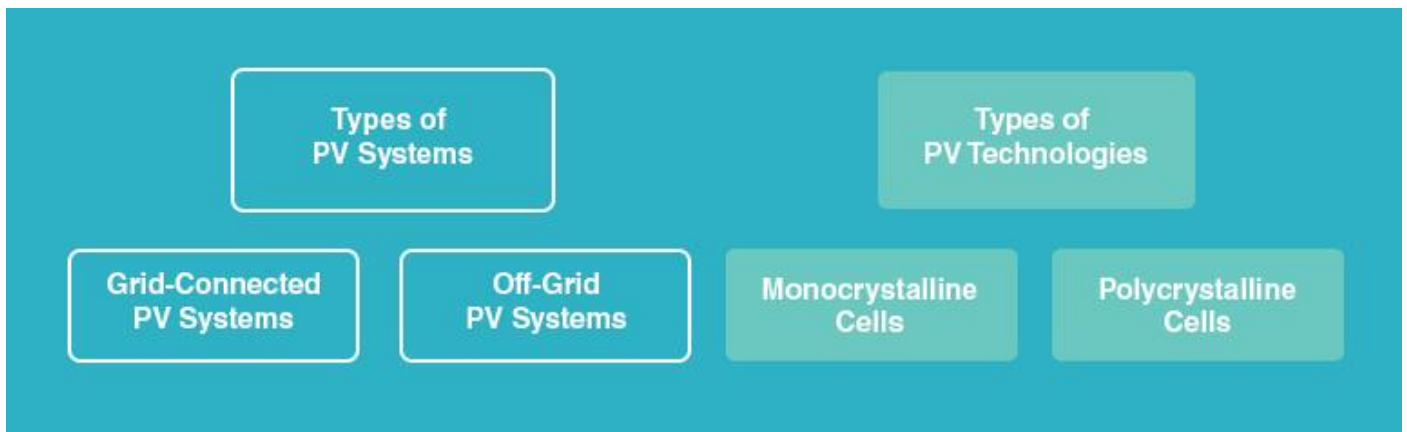
## OUR VISION

Our vision is to instigate a green planet concept in the mind of every denizen across the globe. We care to provide you an affordable necessity that can surely bring you a step ahead in your endeavor to contribute your little bit for Mother Earth.



## ***SOLAR PHOTOVOLTAIC***

A photovoltaic system employs solar modules, each comprising a number of solar cells, which generate electrical power. PV installations may be ground-mounted, rooftop mounted, wall mounted or floating. Solar PV has specific advantages as an energy source: once installed, its operation generates no pollution and no greenhouse gas emissions, it shows simple scalability in respect of power needs and silicon has large availability in the Earth's crust.



**Photovoltaic Electric Power Generation**

**SOME OF OUR PHOTOVOLTAIC INSTALLATIONS**



**100 KWP ROOFTOP SOLAR POWER PLANT,  
VANIKI MAHAVIDHYALAYA, MUNGER.**



**10 KW OFF-GRID, MUNGER**

**100 KW ON-GRID, MUNGER**



**225 KW ON-GRID SOLAR POWER PLANT  
LALIT NARAYAN MITHILA UNIVERSITY  
DARBHANGA, BIHAR**





**5KW SOLAR TREE,  
CSIR-CMERI, DURGAPUR, W.B**



**10KW ON-GRID SOLAR POWER PLANT,  
RAMMOHAN COLLEGE, KOLKATA,**



**30 KWP ON-GRID SOLAR POWER PLANT  
BDO OFFICE, RANINAGAR-I,  
MURSHIDABAD**



**10 KWP ON-GRID SOLAR POWER PLANT  
GRAM PANCHAYAT OFFICE DHULAUARI,  
MURSHIDABAD**



**10 KWP ON-GRID SOLAR POWER PLANT  
GRAM PANCHAYAT OFFICE JURANPUR,  
MURSHIDABAD**



**10 KWP ON-GRID SOLAR POWER PLANT  
BDO OFFICE, JALANGI,  
MURSHIDABAD**





**7 KWP ON-GRID SOLAR POWER PLANT  
SDO OFFICE, DOMKAL,  
MURSHIDABAD**



**10 KWP ON-GRID SOLAR POWER PLANT  
GRAM PANCHAYAT OFFICE ISLAMPUR  
CHOWK, MURSHIDABAD**



**13 KWP OFF-GRID SOLAR POWER PLANT  
SCIENCE & TECHNICAL UNIVERSITY,  
NAMKOM, RANCHI, JHARKHAND**



**5.2 KWP OFF-GRID SOLAR POWER PLANT  
SALT LAKE, KOLKATA, SIEMENS LIMITED**



**65 KWP OFF-GRID SOLAR POWER PLANT – NHPC KARGIL**





**12 KWP SOLAR POWER PLANT  
DRDA, GAYA, BIHAR**



**90 KWP SOLAR POWER PLANT  
CENTRAL JAIL, GAYA, BIHAR**



**30 KWP ON-GRID  
SOLAR POWER PLANT  
TEKARI, BIHAR**



**40 KWP ON-GRID SOLAR  
POWER PLANT CIVIL COURT  
NAWADA, BIHAR**



**30 KWP ON-GRID SOLAR POWER PLANT  
SOUTH EASTERN RAILWAY, ADRA  
DIVISION, WEST BENGAL**

## SOLAR STREET LIGHTING SYSTEM

	SOLAR POWER LED BASED STREET LIGHT							CFL BASED
MODEL	IM0937	IM1250	IM1875	IM2475	IM36150	IM50160	IM60210	IM1175
Light Output in Lumen	900	1200	1800	2400	3600	5000	6000	700
Nominal Power	9W	12W	18W	24W	36W	50W	60W	11W
Efficiency	> 90%							> 85%
Battery	12V 40AH	12V 40AH	12V 75AH	12V 75AH	12V 150AH	12V 150AH	12V 200AH	12V 75AH
SPV Module	12V 37Wp	12V 50Wp	12V 75Wp	12V 75Wp	12V 150Wp	12V 160Wp	12V 210Wp	12V 75Wp
Autonomy	1 Day	1 Day	1 Day	1 Day	1 Day	1 Day	1 Day	2 Days
Nominal Battery Voltage	12 Volt							
Charge control	Controller Based Charging							
Working of Light	Automatic Dusk to Dawn							
Display Indications	LED Type (Green LED: Battery Charging; Red LED: Battery Low)							
Battery Cable	Copper Cable							
Indication	Battery Charging, Battery Low, Battery Over Charge							
Pole	Galvanized Iron 4 mtr. Long pole							
Luminary Body	Aluminum / ABS							
Battery Box	MS Sheet Box with Weatherproof Paint / Polycarbonate Box							
Cooling	Natural Air Cooled							
Protections	Battery Overcharge, Battery Deep Discharge, Reverse Battery							
Ambient Temperature	0°C to + 45°C							



### Advantages of LED Street Lights

- ✓ Super bright LED for better lumen output
- ✓ Life of LED is 10 times the life of CFL
- ✓ Better life – LED can work > 50,000 hours
- ✓ Lower wattage consumption & higher lumen output – 8W watt LED light is almost equivalent to 11 W CFL







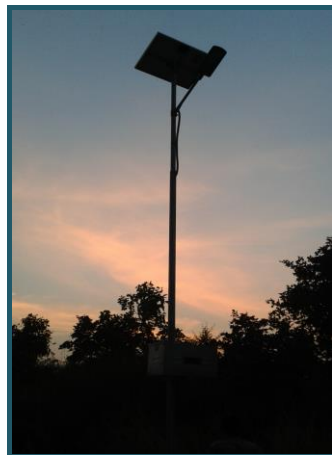
**SOME OF OUR SOLAR STREET LIGHT INSTALLATIONS**



**30 WATT HYBRID SOLAR STREET LIGHT,  
VANI MAHAVIDYALAYA, MUNGER**



**SIEMENS LTD., KOLKATA  
12W & 18W STREET LIGHT**



**EASTERN COALFIELDS,  
JHANJRA, W.B.  
9W STREET LIGHT**



**BANKURA, W.B.  
9W STREET LIGHT**



**DIAMOND HARBOUR,  
WEST BENGAL  
24W STREET LIGHT**



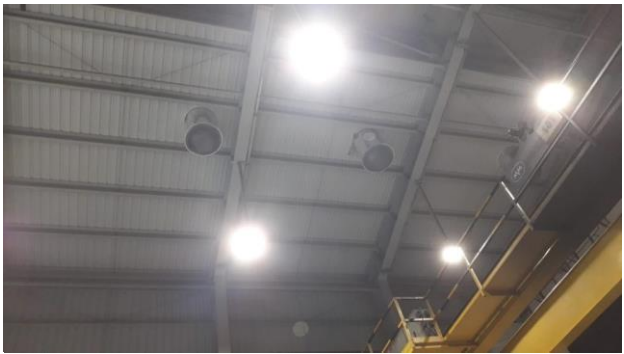
**MAHASUMUND,  
CHATTISGARH  
9W STREET LIGHT**



**PURBO MEDINIPUR,  
WEST BENGAL  
24W STREET LIGHT**

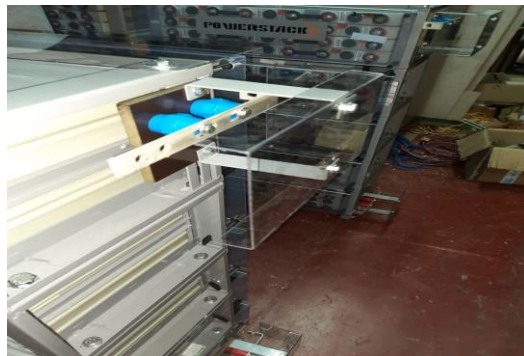


**SOLAR DAY TUBE INSTALLATION**



**400 WATT EQUIVALENT SOLAR DAY TUBE,  
FLENDER DRIVES PVT. LTD.**

**SOLAR MICRO-GRID PROJECT**



**SOLAR BATTERY BANK – 360V 100AH  
CENTRE FOR DEVELOPMENT OF ADVANCED COMPUTING ,  
THIRUVANANTHAPURAM, KERALA**

## ***SOLAR THERMAL***

A Solar Water Heater consists of mainly collector to collect solar energy and an insulated storage tank. In this process radiation from the sun heats up the water inside the evacuated tube collectors and gets stored in the storage tank.

Imperial Solar Water Heaters are equipped with latest technology giving you free hot water every time you need.

### **Features of Solar Water Heater**

- Borosilicated Double Layers Evacuated Tube Collectors
- High density PUF Insulation for more heat retention
- Inbuilt Electrical Heater Element as added feature
- Inner SS tank for longer life of system



### **Plenty of Hot Water with Cool Savings**

<b>1</b>	<b>Capacities available</b>	<b>100ltrs, 150ltrs, 200 ltrs, 250ltrs, 300 ltrs</b>
<b>2</b>	<b>Major Components</b>	Boro-silicate Vacuum Tubes, PUF insulated Hot Water Tank, Galvanized Steel frame & structure
<b>3</b>	<b>Vacuum Tube size and length</b>	58 mm outer diameter 47 mm inner diameter 1800 mm length
<b>4</b>	<b>Water Output</b>	40-80 °C under normal sunny conditions
<b>5</b>	<b>Vacuum tube material</b>	Borosilicate
<b>6</b>	<b>Coating</b>	Selective Coating of Aluminum Nitride & Aluminum (Al-N/Al) -
<b>7</b>	<b>Vacuum of the tube</b>	< <u>3x10<sup>-3</sup> Pa</u>
<b>8</b>	<b>Hail resistance</b>	<30 mm Diameter
<b>9</b>	<b>Solar Water Heater frame and mounting structure</b>	Corrosion-resistant Galvanized steel frame for durability and strength to withstand wind at 250km/hr.
<b>10</b>	<b>Inner tank material/thickness</b>	Stainless Steel 304 food grade
<b>11</b>	<b>Insulation</b>	50 - 60 mm Injected Poly-Urethane Foam (PUF) for minimal heat loss



**SOME OF OUR SOLAR WATER HEATER INSTALLATIONS**



**5000 LTR FULLY AUTOMATED SOLAR WATER HEATER,  
UMAID BHAWAN, JODHPUR, RAJASTHAN**



**1500 LTR, S.N. BOSE CENTRE  
KOLKATA, W.B.**



**7000 LTR, GIRL'S HOSTEL,  
POLYTECHNIC COLLEGE,  
NIRSA DHANBAD**



**7200 LTR, GIRL'S HOSTEL OF  
BIRLA INSTITUTE OF  
TECHNOLOGY, SINDHRI  
CAMPUS, JHARKHAND**



**7000 LTR, HOSTEL OF  
POLYTECHNIC COLLEGE,  
DHANBAD, JHARKHAND**

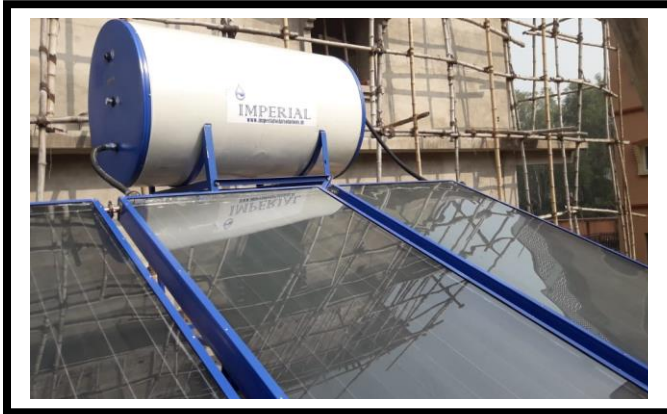




**1000 LTR,  
RAIGANJ, WEST BENGAL**



**2000 LTR, GRAPHITE INDIA LTD,  
WEST BENGAL**



**500 LTR, MAYAPUR  
WEST BENGAL**



**2000 LTR, WAKKA, ARUNACHAL  
PRADESH (BSF CAMP)**



**1000 LTR, HOTEL DEVI DARBAR,  
BARAUNI, BIHAR**



**1200 LTR, BALASORE ALLOYS,  
ORISSA**





**500 LPD, HOLY CROSS  
HEALTH CENTRE, MAIRANG,  
SHILLONG**



**800 LPD ETC SYSTEM  
ADRA ARMY CAMP,  
PURULIA, W.B.**



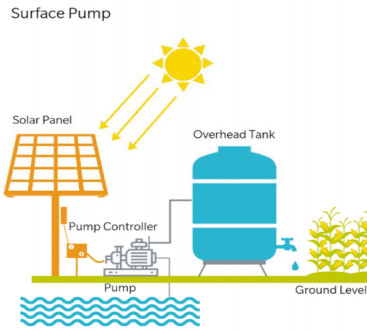
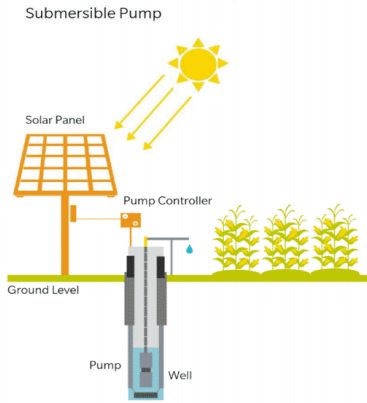
**120 LPD, ARMY BASE  
CAMP, PANAGARH, W.B.  
(GUEST HOUSE)**



**200 LPD  
RIMBI, DARJEELING,  
WEST BENGAL**

**SOLAR WATER PUMP SYSTEM**

**Solar Water Pump Types**



Solar pumps present a **clean, simple and energy-efficient** alternative to traditional electric and fuel-driven pump sets. They are part of an environmentally friendly approach in agriculture and can be used to exploit every region, whether its developed or poor.

We provide both submersible and surface installations.

**SOME OF OUR ESTEEMED CLIENTS**



**SIEMENS**







**FLENDER**

***VOLTAS***