

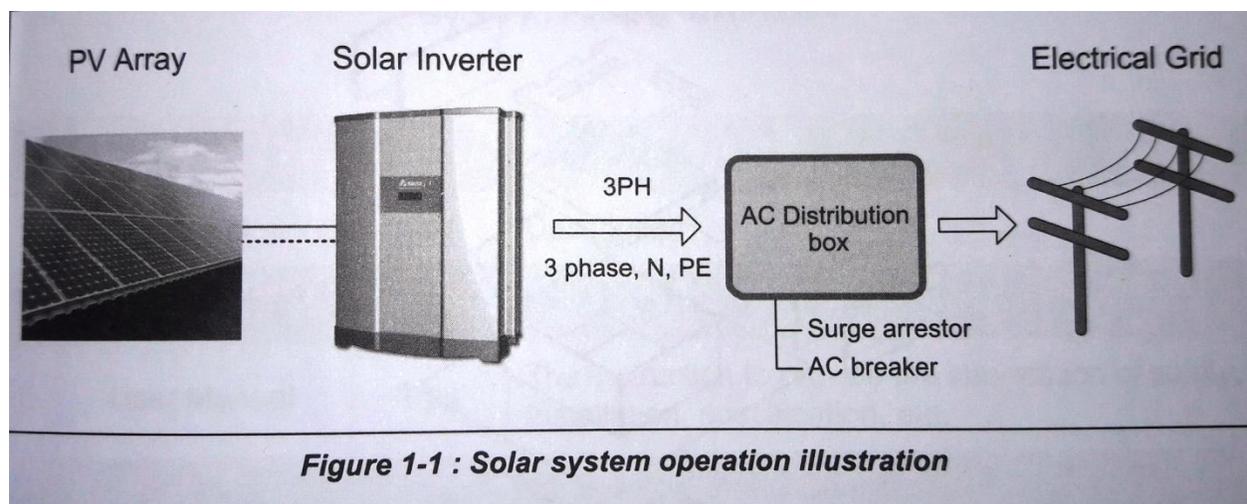
## SOLAR POWER DETAILS

### Description:

This Solar Power is three phase Grid - tie Transformer less system. The Solar energy is converted to Electrical energy through solar inverter. These inverters convert the DC input supplied from roof mounted photovoltaic (PV) modules Array into three phase AC output.

### Application:

This power is utilized directly to our industrial load ( For us it is used for cable manufacturing plant) in day time, thus saving of electrical energy consumption of GRID and can be export to GRID when our plant have low consumption than rated capacity of solar. In night time we import power from GRID to meet the load. Therefore it is called Grid- tie for import & export the power.



### Standard:

Standards generally used in photovoltaic modules:

- IEC 61215 (crystalline silicon performance), 61646 (thin film performance) and 61730 (all modules, safety)
- ISO 9488 Solar energy—Vocabulary.
- UL 1703 from Underwriters Laboratories
- UL 1741 from Underwriters Laboratories
- UL 2703 from Underwriters Laboratories
- CE mark
- Electrical Safety Tester (EST) Series (EST-460, EST-22V, EST-22H, EST-110).

## Technical Details:

<b>Location : New Copper cable Plant</b>		
Total output Power	576 KW	
Total Modules	320Wp	1800 nos
Total Inverters	50 KW	9 nos
<b>Location : Gupta Power Infrastructure Ltd – Unit -2</b>		
Total output Power	428.8 KW	
Total Modules	320Wp	1340 nos
Total Inverters	50 KW	6 nos
	20KW	2 nos

## Features:

Huge electrical power saving thus reduces in electrical energy bill and helps the nation to keep environment pollution free.

Gupta Power Solar PV projects are environment friendly and help in reducing Greenhouse Gas (GHG) emissions that would have otherwise occurred due to the fossil fuel based power generation. If the Solar PV plant starts injecting electricity in the grid, it can help to displace equal amount of electricity that would have otherwise been generated from the GHG intensive grid (Most of the power grid have electricity from coal based power plants). Hence GPIL solar projects are also eligible to earn carbon credits under the Clean Development Mechanism (CDM).

CDM – It is an arrangement under the Kyoto Protocol allowing industrialized countries with a GHG emission reduction targets to invest in projects that reduce emissions in developing countries as an alternative to more expensive emission reductions in their own countries. Such projects can earn Carbon Credits in the form of GHG emission reductions (One carbon credit is equivalent to one ton of carbon dioxide).