



PRESENTATION ON HYBRID SOLAR SYSTEM BASED ON SUN SINE SMART MICRO INVERTERS

ADVANTAGES OF PV SYSTEM

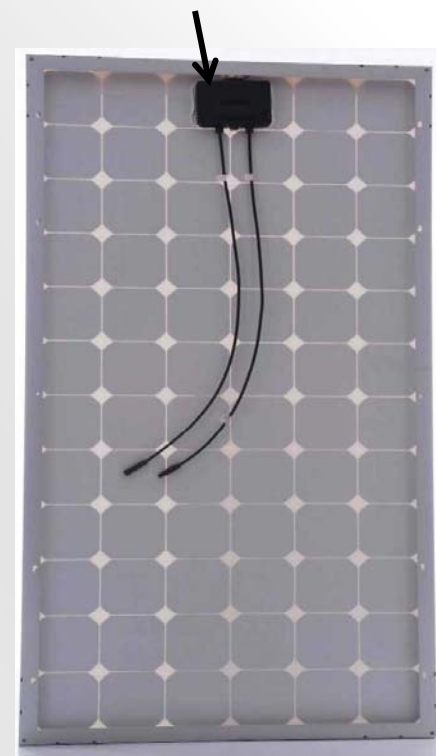
Solar PV Module
Front view



Solar Cell

- Solar panels can be installed in houses / roof-tops and cheap barren lands having sunny weather conditions throughout the year.
- Reduced operating costs given the fact that solar power is free.
- Harmful effects to the environment is reduced (no carbon emissions).
- Reduced dependency to imported crude oil & coal.

Junction Box



Solar PV Module
Back view



UNIQUE SPECIFICS OF PV SYSTEM

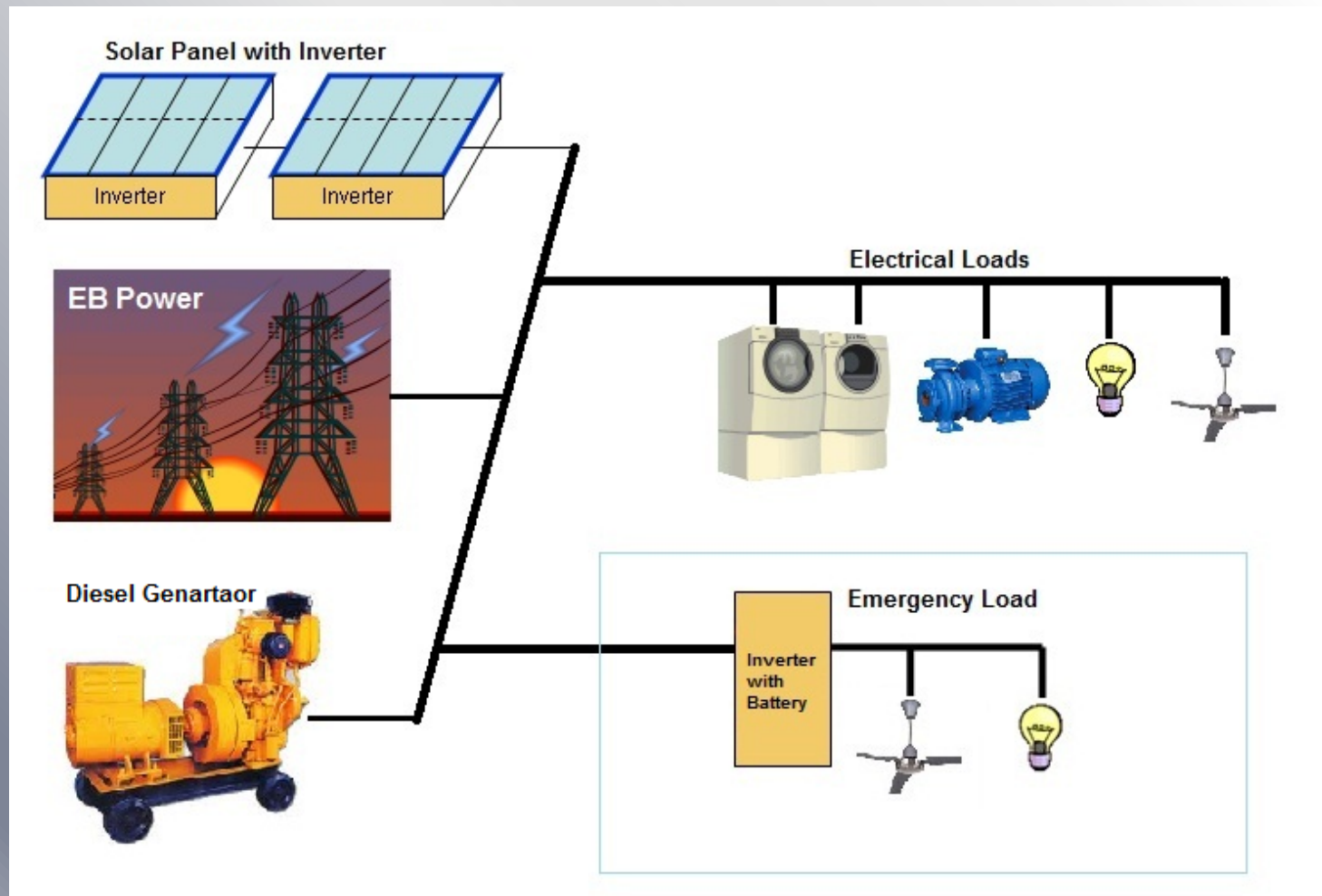
- Requires space of 80 sq.ft per KW
- Works only with sun light during day time (Typically 10 hours)
- Capacity Utilization Factor (CUF) is between 16% – 24% depending on the irradiance
- 1KW of SPV module with Smart Solar Inverter gives a maximum of 4-6 units/day
- Average efficiency of the Output power from the Solar Inverter connected with module is not more than 65%

SUNSINE SMART SOLAR INVERTER

- Is a micro-inverter which converts direct current (DC) from a single solar panel to alternating current (AC). The electric power from several micro-inverters is combined and sent to the consuming devices.
- Produce grid-matching power directly at the back of the panel. Arrays of panels are connected in parallel to each other and fed to the grid.
- Maximizes the solar power harvest.



TYPICAL ILLUSTRATION WITH DIFFERENT POWER SOURCES





ADVANTAGES OF SMART SOLAR INVERTER

- Works seamlessly in synchronization with Utility / Generator / Windmill.
- Modular and Scalable from 250 Watts to Megawatts.
- Optimizes the energy harvest.
- Reduced installation costs.
- Improved system reliability up to 25 years.
- Maintenance free.



APPLICATIONS OF SMART SOLAR INVERTER

Can be deployed in

- Small & Medium Industries
- Educational Institutions
- Hotels
- Hospitals
- IT Parks
- Villas & Flats



COMMERCIAL BENEFITS

- Reduced power & oil bill up to 60%
- 30% subsidy from Government up-to 100 KW for individual beneficiary and 250 KW for RESCOS / NGOS feeding Rural Grid
- 80% accelerated depreciation under Renewable energy Section of IT act of GOI
- REC (Renewable Energy credit) can be availed for 1MW & above Solar projects



THANK YOU

