



Off-grid Solar System

The solar power unit is used to supply power away from central distribution. Ideal for areas with bad or insufficient electrical grid connection. For electrical energy production the unit uses solar panels that supply the energy to batteries through the use of battery charger.

Basic data

- System: LV DC 24 V, LV AC 230 V / TT
- Power Source: 4x 230 - 250 Wp
- Battery capacity: 4x 150 - 200 Ah
- Performance at AC: 600 - 1200 W
- Degree of protection: IP43



How it works

The solar power unit is used to supply power away from central distribution.

For electrical energy production the unit uses solar panels that supplies the energy to batteries through the use of battery charger. An inverter is powered from there to convert DC voltage from 24V to 230V AC. Unit capacity is limited by the number of solar panels and battery capacity. By default, 4 solar panels with power from 230 to 250 Wp are considered and battery capacity from 600 to 800 Ah. For supply to the AC side, a power in the range of 600 - 1200 W is considered, according to the inverter. For connecting end-user appliances, wall sockets based on to user's

location are mounted. The device consists of Schüko company product (charger, inverter), panels supplied are standard PV modules. Welded box with coverlid is used for assembly. Installation is carried out using standard electrical equipment.

Fused isolator in both conductors is used to disconnect the solar panels. To disconnect the batteries, a switch fuse is used in one pole, while the other pole is connected to ground. The AC side is equipped with a circuit breaker and power outlets.

Charger and inverter have integrated protection devices to protect against overload and over-current. A grounding screw is located on the cabinet for grounding.