



Photovoltaic Solar Modules

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|---|--|---|------------------------|----------|--------------------|----------|----------------|--------|-----------------|---------|------------------|--------|---------------|--------|------------------|-------|------------------------|--------|-------------|-------|--------------------|-----|--------------------|-------------------------|-------------|--------------------------------------|
|  | <p>2 pcs. Solar Panels 120W Watt Mono</p> <p>Two high-quality solar panels monocrystalline with 19.0 % efficiency Photovoltaic module 120 Wp Watt. For small gardens, camping, self-sufficient power supply ...</p> | <p>Solar cell hailproof covered and sealed with tempered glass. The high-quality module technology also ensures charging on cloudy days.</p> <p>Life expectancy approx. 25 years. For 12 volt system voltage. Nominal module voltage 19.86V No-load voltage 23.7V Nominal cell current 6.04A Short-circuit current 6.23A Dimensions: 1200 x 510 mm without guarantee With sturdy aluminium frame 30mm Connection box at the rear with short connection cables 2.5mm, length 50cm with waterproof MC4 connectors. Ambient temperature: - 40°C to + 85°C S-SOL12122B</p> | | | | | | | | | | | | | | | | | | | | | | | | |
|  | <p>PV Solar Panel 300W Watt Mono - at 10 pcs. or more</p> <p>Monocrystalline solar-module 33V of german production with high degree of efficiency. at ordering quantity 10 pcs. or more.</p> | <p>High quality monocrystalline solar-cells (tempered glass encapsulated, hailproof) This modern cell technology has a high degree of efficiency and allows charging also at cloudy weather. On the back connecting cables with waterproof MC4 connectors IP67 Made in Germany</p> <table border="0"> <tr> <td>performance guarantee:</td> <td>25 years</td> </tr> <tr> <td>product guarantee:</td> <td>11 years</td> </tr> <tr> <td>Nominal power:</td> <td>320 Wp</td> </tr> <tr> <td>System voltage:</td> <td>24 Volt</td> </tr> <tr> <td>nominal voltage:</td> <td>33.06V</td> </tr> <tr> <td>idle voltage:</td> <td>40.73V</td> </tr> <tr> <td>nominal current:</td> <td>9.79A</td> </tr> <tr> <td>short-circuit current:</td> <td>10.16A</td> </tr> <tr> <td>Efficiency:</td> <td>19.1%</td> </tr> <tr> <td>With bypass diode:</td> <td>20A</td> </tr> <tr> <td>Temperature range:</td> <td>-40 C deg to + 85 C deg</td> </tr> <tr> <td>Dimensions:</td> <td>1670 x 1006 x 38 Dimensions may vary</td> </tr> </table> <p>With stable aluminum frame. (black for a surcharge)</p> <p>Certification mark: VDE Delivery time aprx. 1 week. Minimum order quantity 5 pieces S-SOL24330M</p> | performance guarantee: | 25 years | product guarantee: | 11 years | Nominal power: | 320 Wp | System voltage: | 24 Volt | nominal voltage: | 33.06V | idle voltage: | 40.73V | nominal current: | 9.79A | short-circuit current: | 10.16A | Efficiency: | 19.1% | With bypass diode: | 20A | Temperature range: | -40 C deg to + 85 C deg | Dimensions: | 1670 x 1006 x 38 Dimensions may vary |
| performance guarantee: | 25 years | | | | | | | | | | | | | | | | | | | | | | | | | |
| product guarantee: | 11 years | | | | | | | | | | | | | | | | | | | | | | | | | |
| Nominal power: | 320 Wp | | | | | | | | | | | | | | | | | | | | | | | | | |
| System voltage: | 24 Volt | | | | | | | | | | | | | | | | | | | | | | | | | |
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| Dimensions: | 1670 x 1006 x 38 Dimensions may vary | | | | | | | | | | | | | | | | | | | | | | | | | |

Photovoltaic Off-Grid Power Systems with Battery



PV Solar Power System Kit 12V 140W



Independent power generation. Solar power island system with solar module and battery
S-SOL910-12

Solar-powered power supply system for generating 12V DC.
Areas of application: Vineyard, arbour, allotment garden, alpine hut, water pump, animal stable, mobile phone, camera ...
In order to provide electrical energy even at night or when the sky is overcast, the system is equipped with rechargeable batteries.

Technical data:

Solar module output in sunshine: 190 Wp
Maximum connectable loads: 400 W
Short-term peak load (starting current) 1000 W
Short-circuit protection and overload circuit.

In order to provide electrical energy at night or under cloudy skies, the system is equipped with rechargeable batteries.

Energy storage: 1.2 KWH
Operating time with fully charged battery 5 hours at 200 watts continuous consumption (or
(or 24 hours at 50 W continuous consumption / 12W continuous operation).
The higher the consumption, the shorter the operating time will be.

The system is delivered ready for connection and consists of the following components:

1 monocrystalline solar module, sealed and hail-resistant, life expectancy approx. 25 years.

The high-quality solar cell technology also guarantees charging on cloudy days.

Dimensions approx. 1160 x 670 x 35mm.

Mounting bracket for solar module for attachment to a flat roof or slightly sloping roof.

1 solar charge controller with overcharge protection and deep discharge protection.

1 solar battery AGM 12Volt 100Ah longlife.

Housing: aluminium very compact: L 200mm, W 80mm, H 64mm

6 metre cable to the solar modules.

Battery cable

Assembly instructions

Weight: 50,1 kg



Off-Grid Solar Home Power System 230V 3kW



Photovoltaic energy supply. Complete generating package with PV-modules, batteries and inverter 230 volt. S-SOL94AB

Solar powered PV isle energy system for generating of 230 V AC voltage. For use in regions without electricity. To supply electrical energy even at night or under cloudy sky, this system has an energy store with batteries.

Inverter:

Combined power supply for photovoltaic, mains and battery operation. The battery charging can be done via the solar modules or via the power grid or an auxilliary diesel generator.

MPPT Maximum power point tracking adjusts the solar module voltage to the battery voltage for for up to 30% more power from the solar modules.

Overload and deep discharge protection for the batteries.

Output voltage: 230V

Single Phase 50 -60Hz, auto-sensing

Pure sine wave

Maximum consumer load capacity: 3000VA / 2400W

Short-term peak load (starting current for motors): 3500 W

Efficiency: 98%

Short circuit protection and overload cut-off.

Standby power consumption only 2W

Temperature range: 0 - 55°C

Housing: Steel sheet painted

Dimensions: 600mm x 600 x 600mm

Solar panels:

Solar module power at sunshine: 2800 watts peak

Monocrystalline solar modules,

Power: 265Wp

Efficiency: 16% - 17%

Sealed and resistant to thunderstorm or hail.

Life expectancy approx. 25 years.

The high-quality solar cell technology has a high degree of efficiency and allows charging also at cloudy sky.

The required area for mounting the solar modules is about 21 square meters (e.g., 3m * 7m).

Energy storage:

4 Solar batteries AGM longlife.

Capacity: 7.4 kWh

System voltage: 48V

Operating time with fully charged batteries 3 hours at 10A / 2300 watts of continuous consumption

(Or 12 hours at 625W).

The higher the consumption, the shorter will be the backup time.

Continuous operation 280W - 900W (average sampling day and night, depending on the weather, sun and region)

On request, the energy store is also available in smaller stages to reduce costs.

The system is delivered ready for connection and consists of the following components:

12 solar modules,

1 inverter for wall mounting

12 solar batteries

Mounting rails and brackets for installation of the solar panels on inclined roofs. Other installation accessories on request.

Cables and terminals.

Assembly Instructions

The inverter is only for indoor use.

This system is also ideal for areas with frequently power shortages.

The modules truss system is for flat roof or for yard installation.

The energy yield roughly equivalent to the annual electricity consumption of a 1-family house with 3 persons in Egypt.

Weight: 972,5 kg



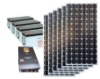
Off-Grid Solar Power Box 230V 3kW

Independent power generation. Rollable solar power inverter system with PV panels and lithium iron phosphate battery storage. S-SOL94AL



Off-Grid Solar Power Box 230V 3kW

Photovoltaic energy supply. Transportable inverter box without PV-modules, with LiFePo4 batteries
S-SOL94L



Off-Grid Solar Power Generation System 230V 3kW

Photovoltaic energy supply for tropical and desert countries. Complete package with PV-modules, batteries and inverter 230 volt.
S-SOLAR093



Photovoltaic Solar Refrigerator

Fridge and Freezer with solar PV modules.
S-SOLAR52



Solar electric powered refrigerator.
During the day, the system generates electricity from the solar panels and supplies the fridge.
The electrical energy is stored in batteries for 2 days, depending on the ambient heat and how often the refrigerator is opened and closed.
Refrigerator and battery box should be placed in shadow.
With 2 mono-crystalline solar modules, each 205Wp sealed, and hail resistant, life expectancy around 25 years.
The high quality solar cell technology also ensures cooling on cloudy days.
Engel fridge, german branded freestanding refrigerator.
The refrigerator is thanks to its high efficiency and unmatched performance perfectly for use in hot tropical countries.
Engel coolers are for 40 years, the devices of choice for offshore sailors, professional 4x4 expeditions in the tropics, etc. The patented vibrating compressor trouble all ENGEL devices allowed and very quiet operation even at extreme inclination, and excessive vibration.
The coolers are renowned for their very high quality and their unique longevity.
For this reason, this is the only manufacturer with a 3 year warranty!
Fridge dimensions: W x H x D 520 x 780 x 548 mm (without door 505 mm)
Capacity: 80 liters
Material: film-based polyurethane foam body, door frame steel, door with magnetic closure
Color: Frame lacquered gray, black door
Weight: 29 kg
Internal Temperature range: +5 ° C to > -2 ° C
**-Freezer, electronic thermostat
Ambient temperature -20C deg to +55C deg
Power consumption: 32 Watts
Front Decoration: interchangeable
Door hinge: Left / Right
System voltage: 24 Volt
Current max. 8.33A
Mounting hooks for the solar modules to be mounted on sloped roof.
Cables and terminals, and fuse.
Weight: 140 kg

Solar Lighting for Parking Lot, Carport, Bus Shelters



PV Solar Carport Lighting Set



Independent solar photovoltaic light system for carport, garden cottage, camping mobile ...
S-SOLAR74L

Complete photovoltaic system package for lighting a single garage or parking space.
With delicate aluminium LED light strip, light switch, solar module, battery and charge controller.
This set is not a "one box system", but consists of selected individual components.
The advantage is that you can mount the light switch on the wall and not necessarily on the battery box.
We supply sufficient cables and an easy-to-understand connection diagram for simple installation.
As an accessory, you can order a motion detector that automatically switches on the lighting.

General technical data:
Ambient temperature: -20°C ~ +45°C (extension -35°C ~ +65°C possible on request)
Protection class: III safety extra-low voltage
Marks of conformity: CE, RoHS, WEEE
20-year availability guarantee for spare parts.

Light strip specification:
1 LED light strip in aluminium profile
(brighter than a 60W incandescent bulb)
LED power: 10W
Energy efficiency class C
Light colour 4000K neutral white
Central illuminance: > 30 Lux (1.8m height)
LED life approx. 40,000 hours
Protection class: IP65 (water and storm protected).
Dimensions: Length 100cm, width 23mm, height 11mm.

Motion detector (optional):
IR motion detector
Mounting: surface-mounted, swivelling
Activation only in darkness
Range: 8 - 10m adjustable
Detection angle: 180
Twilight threshold: Adjustable range 10 lux - 1000 lux
Adjustable hold time: 5 sec - 10 min
Protection class: IP44

Solar panel specifications:
Monocrystalline silicon with very high efficiency
Hardened protective glass, hail-resistant
The high-quality module technology ensures charging even on overcast days. On dark days in winter, recharging is limited and the lighting duration is thus shortened.
Efficiency: > 16
Output: 30 Wp (without extension)
Life expectancy: approx. 20 years
Module dimensions: approx. 430 x 550 x 28mm
Mounting bracket for solar module,
2 m cable with connector

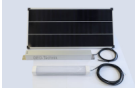
Battery storage:
Battery type: lead-gel 12V,
maintenance-free, longlife, for solar cycle operation
Service life approx. 10 years / 20°C
Function also at low temperatures.
against surcharge: Lithium-ion LiFePo4 battery
Self-sufficient operating time in overcast weather (with fully charged battery):
The operating time is up to 12 hours with a fully charged battery.
If the motion detector is switched on for 20 times every 2 minutes, this corresponds to 18 days.
Battery box: Sturdy plastic IP65
Dimensions: L 180 x W 180 x H 85mm

Supplied disassembled with the following components:
1 solar panel with mounting bracket,
1 LED light strip,
1 battery accumulator,
1 box for battery and charge controller

1 solar charge controller,
1 wall switch,
10 m cable.
Illustrated assembly instructions
All components are pre-wired and prepared for quick assembly.

Weight: 14 kg

Solar lighting for garden shed, stable, weekend house



Solar Lighting for Container Housings

Independent solar powered LED light system for accommodation containers or mobile camps without electricity.

Powerful complete package with LED light fixture, solar panel, battery and solar controller. Ready to mount including installation manual and:
Monocrystalline solar panel 300Wp, thunderstorm-proof, lifespan > 25 years,
Module dimensions: 1800 x 1000 x 35mm.
2 mounting brackets,
2-4 rigid LED lighting bars with aluminium profile 50cm light output 650 lm
High power solar gel battery 12 volt, longlife maintenance-free
Solar controller with deep discharge protection,
Wall switch.
Protection case IP65 for battery and electronic,
25 m cable.
Operating duration at cloudy weather 35 hours (at full charged battery).
Daily operation 8 / 12h depends on the ordered model and the weather conditions.
No guarantee on batteries.
Dimensions of the LED light bars: L 500 mm, B 20 mm, H 10 mm
S-SOLAR75

Solar Lighting for Parking Lot, Carport, Bus Shelters



Solar Lighting for Carport with motion sensor

Independent LED solar lighting for garage forecourt, front door, carport or yard.

With motion detector. Easy to install, simple to retrofit.
S-SOLAR76-1

Powerful PV solar lighting with swivelling LED light and motion detector. The system consists of only 2 components: The solar module and the luminaire unit.

The connection is simply plugged together with the enclosed cable. Only the luminaire and module need to be screwed in place as required using the fastening material provided. The lighting is ready.

Function:

The light switches on automatically in the dark. It remains in economy mode with 30% light output. When a person is detected, the brightness switches to 100%. After about 30 seconds, the brightness drops back to economy mode. In winter, when the weather is dark for several days, it is possible that the solar module does not supply enough energy and the luminaire does not shine continuously.

Luminaire module:

LED Power: 10W
Pleasant brightness 30 Lux / 1.8m
Light colour: 4000K bright white
IR detector Range: 6m
Detection angle: 180
Swivelling wall floodlight made of black aluminium.
Protection class: IP65
Luminaire dimensions: Width 242mm, D 70mm, H 130mm

Solar panel:

1 monocrystalline solar module, sealed and hail-resistant, Life expectancy approx. 20 years.
Module dimensions: approx. 190 x 290 x 25mm
Mounting bracket for solar module,
2 m cable with plug connector

Technical data:

Self-sufficient light duration approx. 8 hours depending on weather conditions with fully charged battery.
At 60 switch-ons per night, this corresponds to about one to two nights if no solar charging takes place.
With LiO longlife batteries 8AH
Deep discharge protection.

2-year warranty, batteries excluded.
Weight: 2 kg



PV Solar Double Car Parking Lighting Set

Independent solar photovoltaic light system for big carport, garden cottage, camping mobile, mountain cottage ...
S-SOLAR77



Solar Lighting Set for large Car Ports with motion sensor

Independent, bright LED solar lighting for covered vehicle parking spaces, also for double carports.

With motion detector. Easy to install, simple to retrofit.

S-SOLAR78

Very bright PV solar lighting with swiveling LED light and motion detector. The system consists of two components: the solar module and the luminaire unit.

The connection is simply plugged together with the attached cable. Just light and module must be screwed tight - Ready to go.

Luminary fixture:

LED power 10W

Luminous output: 750 lm

Pleasant brightness 30 lux / 1,8m

Light color: 4000K natural white

Automatic switch-on to 10% economy mode in the dark.

Upon detection of a person, the lamp switches to full light intensity.

After about 30 seconds, the lighting switches back to economy mode.

IR detector Range 5 - 8 m at 180 ° detection angle.

Dimensions: W 300 mm, H 150 mm, D 120 mm

Weatherproof protective housing IP54

Solar module:

1 monocrystalline solar module, sealed and hailproof, life expectancy approx. 25 years.

The high-quality solar cell technology also ensures charging in cloudy skies.

Module dimensions: about 350 x 360 x 25mm

Mounting bracket for solar module,

2 m cable with connector

Technical specifications:

Self-sufficient light duration approx. 8 hours depending on weather conditions with fully charged rechargeable battery.

With 60 starts per night, this will be 2 nights if no solar charge is applied.

With LiO longlife batteries, 8AH

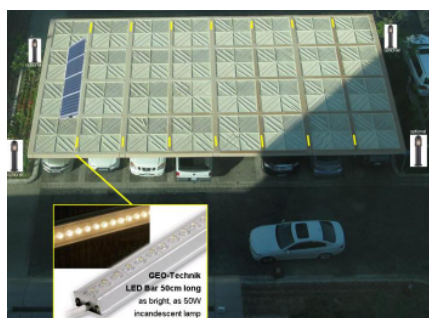
Deep discharge protected.

3 years warranty, batteries excluded.

Weight: 2,4 kg



Solar Lighting for Parking Lot 16 Cars



Independent photovoltaic-solar lighting for large, covered car parks without electricity connection.

S-SOLAR79-4

Complete package for pv lighting without electrical grid.

Designed for sun rich countries close to the equator.

For installation in Europe or other countries with average or lower sun intensity, we suggest to use different solar modules.

Pls. ask us for free calculation for your personal optimized lighting system.

On request, we can also supply with IR movement detector for lighting on demand.

High quality monocrystalline solar modules (tempered glass encapsulated, hailproof) aprx. 25 years life expectancy.

This modern cell technology has a high degree of efficiency and allows charging also at cloudy weather.

Very long maintenance-free system lifespan.

Technical specifications:

Autarkic operating time: > 30 h at fully charged battery.

The lighting starts automatically at sunset and stops in the morning.

Daily lighting hours: Max. 12 h

Light colour: CCT 4000K neutral white (on request also 3000K warm white).

Autarkic Solar Lighting System, consisting of:

4 Solar Modules with mounting material,

Control system with automatic nighttime switch, fixed on one of the roof porting columns of the canopy, battery box, distributor boxes and 50m electrical cable.

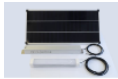
This set is designed for parking with max. 16 car places. For more places you need several systems,

Pls. order extra:

Max. 16 pcs. robust aluminium LED Light bars for installation below the carport roof, between each parking space.

Weight: kg

Solar lighting for bus stop



Solar Lighting Set for Bus Stops



Independent LED solar lighting for bus stops, bus shelters, bus shelters, animal stalls.
S-SOLAR80

High-intensity PV solar lighting with LED, solar panel, battery and solar controller.
Ready to connect with blueprint.

Light Control:

Automatic switch on at sunset and switch off at sunrise.
Luminous duration digitally programmable via timer
Power reserve: 3 years (lithium battery)
Current: Max. 10A
17 time settings can be made.
Warranty: 4 years

Example:

Switching on at dusk (default), switching off in the evening via timer Mo-Fr. at 22:00 o'clock
Morning switch on at 05:00 clock, shutdown at sunrise (default)
Off on Saturday and Sunday.
All functions are preprogrammed by us according to project and customer specification, so that the set is ready to use immediately after installation.
Waterproof IP67 protective housing for battery and electronics.

Luminaire specification:

1 impact-resistant aluminum LED light strip
Dimensions: L 500 mm, W 20 mm, H 10 mm
LED type: SMD chipset
LED power: 5W
Energy efficiency class A
Light color 4000K neutral white (from 10 pieces on special order also 3000K warm white).
No UV radiation for reduced insect attractiveness
LED efficiency: > 112 lm / w
Luminous efficiency: > 100 lm / w
Lumen flux: 625 Lm
Central illuminance: > 30 lux (1.8m height)
LED life about 50,000 hours
Type of protection: IP65 (protected against water and storm).
Impact resistance: IK10
Warranty: 4 years

Solar module specifications:

Monocrystalline silicon with very high efficiency
tempered protective glass, hailproof
This high quality module technology also ensures charge in overcast skies.
Efficiency: > 19%
Power: 50Wp
Module dimensions: approx. 630 x 550 x 28mm
Life expectancy: approx. 25 years
Performance Guarantee * 20 years 80% / 10 years 90%
* except in the case of mechanical impact

Battery storage:

Battery Type: Lithium-ion LiFePo4 battery 12V
maintenance-free, longlife, for solar cycle operation
Capacity: 240 Wh
Lifetime approx. 7 - 11 years / 20 ° C
Function even at low temperatures.
Self-sufficient operating time in overcast weather (with fully charged battery):
8 hours. Variant: 60 hours
12 hours. Variant: 90 hours

Delivery:

Solar module with connection cable and angles for mounting on a foundation, roof or on a wall
LED strip with connecting cable and fixing clips
Light control
Housing for charge controller and timer
Weekly timer programmable
Battery box with sealing set
Solar battery with 3m underground cable
Weight: 24 kg



Solar Lighting Set for Bus Stops with motion sensor



Independent LED solar lighting for bus stops, bus shelters, bus shelters with canopy.
With motion detector. Easy to install, simple to retrofit.
S-SOLAR80-1

Powerful PV solar lighting with swivelling LED light and motion detector. The system consists of two components: The solar module and the luminaire unit. The connection is simply plugged together with the enclosed cable. Only the luminaire and module need to be screwed in place with the enclosed fastening material. The lighting is ready.

Function:
The light switches on automatically in the dark. It remains in economy mode with 10% light output. When a person is detected, the light switches to full light intensity. After about 60 seconds, the brightness drops back to economy mode. A remote control is available at extra cost to change the basic brightness values.

Luminaire module:
LED Power: 10W
Luminous flux: 1020 Lm
Pleasant brightness: 30 Lux / 1.8m distance
Light colour: 4000K natural white
IR detector range: 6m
Detection angle: 180
Housing: Swivel-mounted wall floodlight in grey aluminium.
Dimensions: W 240 mm, H 130 mm, D 70 mm
Protection class: IP65

Solar panel:
Monocrystalline solar module, sealed and hail-resistant, life expectancy approx. 25 years.
The high-quality solar cell technology ensures charging even on cloudy days. In winter, when the weather is dark for several days, the solar module may not supply enough energy and the light may not shine continuously.
Module dimensions: approx. 350 x 360 x 25mm
Mounting bracket for solar module,
Connecting cable: 2 m long, with plug connector

Technical data:
Self-sufficient light duration: approx. 8 hrs. depending on weather conditions with fully charged battery.
At 60 switch-ons per night, this corresponds to about 2 nights if no solar charging takes place.
With LiO longlife batteries: 185 Wh
Deep discharge protection.
Warranty: 2 years, batteries excluded.
Weight: 2,4 kg

Accessories for outdoor fixtures



Remote unit for Solar Lighting Set S-SOLAR80-1

Remote controller for the solar powered LED light system for bus shelter, small train station ...
S-SOLAR80-1N

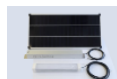
Remote control to be able to change the basic brightness values.
Weight: 0,1 kg

Solar lighting for bus stop



Solar Lighting for Bus Shelter

Independent LED solar lighting for bus stops, bus shelters, bus stops. With motion detector and additional permanent lighting for the timetable or an advertising board.
S-SOLAR80-3



Solar Lighting for large Bus Shelter with clock timer

Independent LED solar lighting for large bus stops, large bus shelters, bus stop, animal pen.
With timer and basic lighting.
S-SOLAR80-4



Solar Lighting Set for Bus Stops with motion sensor

Independent solar powered LED light system for bus shelter, small train station ...
Plug & Pay solution for simple and very quick installation.
S-SOLAR80-6



Powerful PV solar lighting with LED tube-shaped light and motion detector.
The system consists of two components: The solar module and the luminaire unit.
The connection is simply plugged together with the enclosed cable.
Only the luminaire and the PV module need to be screwed in place with the fastening material provided.
The lighting is ready.

Luminaire module:

LED Power: 18W
Luminous flux: 2200 Lm
High brightness: 30 Lux / 2.8m distance
Light colour: 4000K natural white
Motion detector: Radar, range 5 - 8 m
Detection angle: 180 deg
Automatic switch-on in darkness
Housing: Sturdy ABS surface-mounted luminaire
Dimensions: L 600 mm, H 92 mm, D 84 mm
Protection class: IP67
Impact resistance: IK10

Incl. remote control:

For selecting the different operating modes:
A) Luminaire only reacts to motion detectors and otherwise remains dark.
B) The light is always on 50% economy mode at night; only when a person is detected does the luminaire switch to full light intensity.
After about 60 seconds, the light switches back to economy mode.
Other time functions or continuous light can be selected according to the operating instructions.

Solar module:

Monocrystalline solar module, sealed and hail-resistant, life expectancy approx. 25 years.
The high-quality solar cell technology ensures charging even on cloudy days.
In winter, when the weather is dark for several days, the solar module may not supply enough energy and the light may not shine continuously.
Module dimensions: Approx. 1000 x 500 x 30mm
Mounting bracket for solar module,
Connecting cable: 2 m long, with plug connector

Technical data:

Self-sufficient light duration: approx. 12 hrs. depending on weather conditions with fully charged battery.
At 60 switch-ons per night, this corresponds to 2 nights if no solar charging takes place.
With LiO longlife batteries: 216 Wh
Deep discharge protection.
Warranty: 3 years, batteries excluded.
Weight: 2,4 kg



Solar bus stop lighting with pole and push button



Switchable lighting for bus stop without power connection. With stable 4m mast and swivelling LED spotlight. 1 - 30 minutes switchable for lighting as needed.

S-SOLAR80-7

Robust photovoltaic area lighting with LED lamp - no power supply required. High brightness - comparable to 100 watt halogen light. With a switch - the lighting is switched on as needed. The shutdown takes place automatically after 1 or 2 hours with an adjustable timer.

So turning off will not be forgotten and the battery will not deep discharge. The LED floodlight is rotatable and pivotable.

All functions are pre-programmed charge on the project and customer requirements from us, so that the lamp is ready for use immediately after construction.

Solar module (without extension): monocrystalline silicon 40W with very high efficiency (tempered safety glass, hail-resistant), about 25 years of life expectancy.

This high-quality module technology allows charging also on cloudy days. Pole and brackets are hot dip galvanized (on surcharge with a UV-resistant painting).

The screws are made from stainless VA steel.

Robust LED luminaire head of diecast aluminum with high protection (water and storm protected).

The solar lamp is maintenance-free - (only the solar module should be cleaned occasionally with water).

Technical specifications:

| | |
|-------------------|-----------------------|
| LED Lamp: | Power LED 10W Chipset |
| LED lifetime: | about 40,000 hours |
| Energy Class: | B |
| Luminous flux: | > 1100 Lm |
| Light color: | 4000K cool white |
| Illuminated area: | Ca. 8 x 5m |
| Mast height: | 4 m |

Autonomous operating time in overcast weather (with fully charged battery):

- a) basic version: 6 hours
- b) with extension kit autumn: 9 hours
- c) with extension kit winter: 12 hours

For adequate reliability in autumn or winter, we strongly recommend our expansion sets.

Ambient temperature: -20 °C ~ + 50 °C (extension possible on request)

Solar battery: Lithium-Eisenphosphat LiFePo4 12V, maintenance-free, long life. Life is about 10 years / 20°C

Temperature-optimized battery-charge and trickle charge to protect the batteries.

Overvoltage and deep discharge protection for the battery.

Reverse polarity and short circuit protection.

Protection lamp head: IP66

Protection Light Control: IP67

Protection class: III Safety extra low voltage

Approvals: CE, RoHS, WEEE

Supplied flat pack with the following components:

LED lamp head with pole mounting,

High power solar battery,

Solar module with stable, screw-pole mounting,

Galvanized steel mast, height 4 meters + anch. section 600mm for concreting,

Microprocessor control lights (located conveniently accessible behind a lockable door in the mast).

Illustrated installation instructions in German or English.

All components are pre-wired and ready for fast assembly.

20 years availability guarantee for spare parts.

The ready-lamp is delivered disassembled, complete with solar panel, mast, battery and lamp.

Weight: 39 kg

Solar lighting for garden shed, stable, weekend house



Luxury Solar home Lighting Set House



The independent solar photovoltaic light system for garden cottage, camping mobile, mountain cottage ...
S-SOLAR81

Complete photovoltaic system package with 3 surface-mounted lights, light switch, solar module, battery and charge controller.
This set is not a "one box system", but consists of selected individual components.

The advantage is that you can mount the light switches on the wall, next to the entrance and on the table, where they are needed and not on the battery box.

We supply sufficient cables and an easy-to-understand connection diagram for simple installation.

The operating time is up to 26 hours with a fully charged battery.

Average daily illumination is approx. 2 hours.

So there is enough reserve to connect further lights or small consumers to the accumulator,

but this shortens the daily lighting time.

On request, we can supply other lights of your choice or we can put together larger systems for holiday home lighting or weekend house lighting.

Operating voltage: 12V

Energy storage: 540 Wh (0.5 kWh)

Scope of delivery:

1 monocrystalline solar module 50W, sealed and hail-resistant, life expectancy approx. 20 years.

The high-quality solar cell technology also guarantees charging on cloudy days.

Module dimensions: approx. 630 x 550 x 28mm.

Mounting bracket for solar module,

1 Decorative LED surface-mounted light for indoors 7 Watt (corresponds to 60W bulb),

1 Decorative LED pendant light above the table for indoors 7 Watt (corresponds to 60W bulb),

1 LED surface-mounted light for outdoors 7 watt (corresponds to 60W bulb), (Alternatively with other lights of your choice at extra charge).

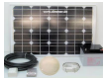
1 high-performance solar gel battery 12 volts maintenance-free (no car battery because of the short service life with frequent discharge).

1 solar charge controller,

2 wall switches,

20 m cable.

Weight: 29 kg



PV Solar Lighting Set Home and Hut



Independent solar photovoltaic system for homes in remote regions, garden cottage, camping mobile, mountain cottage ...
S-SOLAR82

Complete package photovoltaic system with 2 surface-mounted lights, light switch, solar module, battery and charge controller.

This set is not a "one box system" but consists of selected individual components.

The advantage is that you can attach the light switches to the wall, next to the entrance and the table, where they are needed and not on the battery box.

We supply sufficient cables and an easy-to-understand connection diagram for easy installation.

The operating time is up to 26 hours when the battery is fully charged.

Average daily lighting about 2 hours.

So there is sufficient reserve to connect more lights or small consumers to the battery,

however, this shortens the daily illumination time.

Upon request, we deliver with other lights of your choice or we provide you with larger systems for holiday home lighting or weekend house lighting.

Delivery:

1 monocrystalline solar module 50W, sealed and hailproof, life expectancy approx. 20 years.

The high-quality solar cell technology also ensures charging in cloudy skies.

Module dimensions: approx. 630 x 550 x 28mm.

Mounting bracket for solar module,

2x LED surface-mounted luminaire for indoor and outdoor 6 Watt (corresponds to 60W bulb),

1 high-performance gel solar battery 12 Volt maintenance-free (no car battery because of the short life span with frequent discharge).

1 solar charge controller.

2 wall switches,

15 m cable.

Weight: 18 kg



Solar Lighting Set for Garden Cottage



Small solar light system for garden cottage, camping mobile, mountain cottage ...
S-SOLAR83

Complete package photovoltaic system with surface-mounted luminaire, light switch, solar module, battery and charge controller.

This set is not a "one box system", but consists of selected individual components.

The advantage is that you can attach the light switches to the wall, next to the entrance and the table, where they are needed and not on the battery box.

We supply sufficient cables and an easy-to-understand connection diagram for easy installation.

The operating time is up to 26 hours when the battery is fully charged.

Average daily lighting about 3 hours.

So there is sufficient reserve to connect more luminaires or small consumers to the accumulator,

however, this shortens the daily illumination time.

Upon request, we deliver with other lights of your choice or we provide you with larger systems for holiday home lighting or weekend house lighting.

Delivery:

1 monocrystalline solar module 20W, sealed and hailproof, life expectancy approx. 20 years.

The high-quality solar cell technology also ensures charging in cloudy skies.

Module dimensions: approx. 630 x 550 x 28mm.

Mounting bracket for solar module,

1 Robust LED surface mounted luminaire for indoor or outdoor 5W (50W).

1 high-performance gel solar battery 12 Volt maintenance-free (no car battery because of the short life span with frequent discharge).

1 solar charge controller.

1 wall switch,

8 m cable

Weight: 16 kg



PV Solar Lighting Set Stable



Independent LED solar photovoltaic light system for storing cottage, mountain cottage, stable ...
S-SOLAR84

Complete package photovoltaic system with 2 bright surface-mounted lights, light switch, solar module, battery and charge controller.
This set is not a "one box system", but consists of selected individual components.
The advantage is that you can attach the light switch to the wall, next to the entrance, where it is needed and not on the battery box.
We supply sufficient cables and an easy-to-understand connection diagram for easy installation.
The operating time is up to 13 hours when the battery is fully charged.
Average daily lighting about 2 hours.
There is sufficient reserve to connect more luminaires or small consumers to the accumulator, however, this shortens the daily illumination time.
Upon request, we can supply more luminaires of your choice or we can assemble larger systems for you.

Delivery:

- 1 monocrystalline solar module 60W, sealed and hailproof, life expectancy approx. 20 years.
- The high-quality solar cell technology also ensures charging in cloudy skies.
- Module dimensions: approx. 630 x 550 x 28mm.
- Mounting bracket for solar module,
- 2 robust ship lights with LED for inside or outside.
- The brightness corresponds to 2 x 60 watt incandescent lamp.
- 1 high-performance solar gel battery 12 Volt maintenance-free (no car battery because of the short life span with frequent discharge).
- 1 solar charge controller.
- 1 wall switch,
- 25 m cable.
- Weight: 22 kg



Solar Home Lighting System 50W



Complete solar electricity power supply box with lamps for cottage or small house in Africa, Asia or South America.
S-SOLAR86-4

Complete package with LED lights, solar panel, battery and cables.
Easy to install - just plug in and go.

Battery

- Capacity: 576 Wh
- Available with two different battery types:
- AGM battery 12V / 100Ah maintenance-free (service life: approx. 5 years)
- or LiFePO4 battery 12V 50Ah (service life: approx. 10 years)

Solar panel 50Wp

- High-quality monocrystalline solar cells (tempered glass encapsulated, protected against salt spray and moisture)
- This modern cell technology has a high efficiency and allows charging even in cloudy weather.
- Life expectancy approx. 25 years

Battery box:

- Sturdy steel housing
- with solar charge controller 12V / 10A and battery included.
- PV input socket
- 3 sockets: Lamp output
- USB port 5V for charging a mobile phone.
- Including adapter cable for all common mobile phone models.
- Fuse for full protection

Included in delivery:

- 3 pcs. LED lamps 12V / 6W
- 3 set lamp holder with chain switch and 5m cable
- 10m cable with plug for solar panel

Surcharge: FM radio

- Weight: 32 kg



Solar Power and Lighting for small Home 100W



Solar power supply system with LED lamps for cottage or house in Africa, Asia or South America.
S-SOLAR86-5

Complete package with LED lamps, solar panel, battery and solar controller. Easy to install - including setup manual.

Solar panel:

High quality monocrystalline solar-cells (tempered glass encapsulated, protected against salty mist and humidity)
This modern cell technology has a high degree of efficiency and allows charging also at cloudy weather.
Life expectancy aprx. 25 years
12 Volt system voltage.
1 pc. 100Wp solar panel, crystalline

Battery storage:

Battery: Lithium iron phosphate LiFePo4 12V maintenance-free, longlife, for solar cycle operation.
Voltage: 12V
Capacity: 30Ah
Service life approx. 15 years / 20°C
Function also at low or high temperatures.
Autonomous operating time: 30 h (with fully charged battery)

Steel case box:

Stable control box with solar charge controller 12V/10A and included battery.
with PV input socket
4 lamp output connectors
USB outlet 5V for cellphone charging including adaptor cable for all common mobile phone models.
Fuse for full protection
with voltmeter for battery voltage display

4 pcs. 12V/ 6W LED bulbs
2 pcs. E27 light fitting & chain switch for DC light with 5m cable
2 pcs. E27 light fitting & chain switch for DC light with 10m cable
10m cable with plug for solar panel

Extra on surcharge: FM radio
Weight: kg



Solar Home Lighting System 200W



Lighting system with solar modules for small houses and huts in Africa, Asia and South America.
S-SOLAR86-6

Complete package with LED lights, solar panel, battery and cables. Easy to install - just plug in and go.

System voltage: 12V
Capacity: 2400 Wh

Scope of delivery:
Solar panel 200Wp polycrystalline.
Available with two different battery characteristics:
AGM battery 12V/ 200Ah maintenance-free (service life: approx. 5 years)
or LiFePO4 battery 12V 100Ah (service life: approx. 10 years)
Stable control box with solar charge controller and 12V/10A battery included.
4 pcs. LED lamps 12V / 6W
2 sets lamp holder E27 & chain switch and 5m cable
2 Set lamp holder E27 & chain switch and 10m cable
One 10m cable with plug for solar panel

Battery box:
Steel housing
with solar regulator and battery
PV input
4 lamps plug-in connections
with 5V USB output for charging a mobile phone
with fuse for full protection
Voltmeter for battery charge indication
Weight: kg



Solar Power + Lighting for Home 800W



Complete solar electricity and lighting system for cottage and home in Africa, Asia or South America.

S-SOLAR86-8

Complete package with LED lamps, solar modules, battery and solar controller.

System voltage: 24V

Capacity: 3600 Wh

Easy to install. Monocrystalline solar modules sealed with tempered glass cover, protected against high humidity and salty air.

Efficiency > 16

MPPT charging for up to 30% better energy utilisation of the solar modules.

Protection of the batteries against deep discharge.

Maintenance-free and sealed AGM batteries for cycle operation.

Battery life 10 years / 21°C

Scope of delivery:

4 pcs. PV monocrystalline solar module 200Wp

2 pcs. AGM longlife battery 12V/150Ah

Stable control box with solar charge controller 24V / 35A

5 pcs. LED lamps 12V / 6W

5 pcs. lamp holder E27 with chain switch and 10m cable

1 pc. 10m cable with plug for solar panel

Control box in steel housing:

with built-in regulator 35A with PV input socket

5 sockets 12V for the supplied lamp cables

2 sockets 24V for external devices (TV, fridge, fan)

5V USB socket for charging a mobile phone

Cigarette lighter socket for additional inverter

Fuse

Voltmeter for battery charge indication

Weight: 174 kg



Solar Mosq Lighting System 2x100W

Lighting with solar modules for mosque in Africa, Asia and South America.

Complete package with LED lights, solar system, battery and solar controller.

Easy to install,

Scope of delivery:

2 pcs. PV mono-crystalline solar module 100Wp

2 pcs. AGM Longlife battery 12V/65Ah maintenance-free (service life: approx. 5 years)

Stable control box with solar charge controller 24V/20A as well as batteries.

5 pcs. LED lamps 12V / 6W

2 pcs. LED lamps 12V / 13W

7 pcs. lamp holder E27 & chain switch and 10m cable

1 pc. 10m cable with plug for solar panel

Steel power box: with PV input socket Plug-in connections for 7 lamps with

5V USB output for charging a mobile phone Cigarette lighter socket

for small inverters with fuse for full protection Voltmeter for battery voltage

display

S-SOLAR88-5



Solar School Lighting System 2x100W



Lighting with solar modules for small school in Africa, Asia and South America.

S-SOLAR88-6

System voltage: 12V

Capacity: 1560 Wh

Easy to install - including setup manual.

High quality monocrystalline solar-cells (tempered glass encapsulated, protected against salty mist and humidity)

This modern cell technology has a high degree of efficiency and allows charging also at cloudy weather.

Life expectancy aprx. 25 years

Including:

2 pcs. PV monocrystalline solar panel 100Wp

2 pc. AGM longlife battery 12V/65Ah maintenance-free (life time: aprx. 5 years)

Stable control box with solar charge controller 24V/20A and included battery.

10 pcs. 12V/ 9W LED bulbs

10 pcs. E27 fitting & chain switch for DC light with 10m cable

1 pc. 10m cable with plug for solar panel

Steel power box:

with PV input socket

10 pcs. lamp output connectors

10 pcs. USB outlets 5V for cellphone charging

including 10 adaptor cables for all common mobile phone models.

with cigarette light socket for small power inverter

Fuse for full protection

voltmeter for battery voltage display

Weight: kg



Solar School Lighting System 8x100W



Lighting with solar modules for schools in Africa, Asia and South America.

S-SOLAR88-7

System voltage 24V

Capacity: 4800 Wh

Easy to install - including setup manual.

High quality monocrystalline solar-cells (tempered glass encapsulated, protected against salty mist and humidity)

This modern cell technology has a high degree of efficiency and allows charging also at cloudy weather.

Life expectancy aprx. 25 years

Including:

8 pcs. PV monocrystalline solar panel 100Wp

4 pcs. AGM longlife battery 12V/100Ah maintenance-free (life time: aprx. 5 years)

Stable control box with solar charge controller 24V/ 45A and included batteries.

10 pcs. 12V/ 9W LED bulbs

10 pcs. E27 fitting & chain switch for DC light with 10m cable

1 pc. 10m cable with plug for solar panel

Steel power box:

with built-in 45A controller

with PV input socket

10 lamp output connectors

10 pcs. USB outlets 5V for cellphone charging

including 10 adaptor cables for all common mobile phone models.

with cigarette light socket for small power inverter

Fuse for full protection

voltmeter for battery voltage display

Weight: kg



Solar Health Center Lighting System 7x100W



Solar power supply and lights for clinic in Africa, South America, Philippines or desert countries.
S-SOLAR88-8

Complete package with LED lamps, solar system, battery and solar controller.

System voltage: 24V
Capacity: 8400 Wh
Easy to install

Control box:
Robust steel housing
with solar charge controller 24V / 40A
and batteries.
PV input socket and lamps
5V USB output for charging a mobile phone
Cigarette lighter socket for additional inverter
Fuse for full protection
Voltmeter for battery charge indication

Also included in delivery:
3 pcs. monocrystalline solar module 265Wp
7 pcs. AGM Longlife battery 12V/100Ah maintenance-free (service life: approx. 5 years)
9 pcs. LED lamps 12V / 6W
9 Set lamp holder E27 & chain switch and 10m cable
1 pc. 10m cable with plug suitable for solar panel
Weight: kg



Solar Health Center Lighting System 10x100W

Solar lighting with solar modules for bush clinic, field clinic, mobile hospital in Africa, Asia and South America.
Complete package with LED lamps, solar panels, batteries and solar controller.
Easy to install - including setup manual.

Light fixtures:

20 pcs. 12V/ 6W LED bulbs
20 pcs. E27 fitting with chain switch for DC light with 10m cable

Solar panels:

4 pcs. PV monocrystalline solar panel 265Wp
High quality monocrystalline solar-cells (tempered glass encapsulated, protected against salty mist and humidity)
This modern cell technology has a high degree of efficiency and allows charging also at cloudy weather.
Life expectancy aprx. 25 years
Efficiency: > 16%
nominal voltage 37.3 volt
idle voltage 50.9 volt
nominal current 5,46 amp
short-circuit current 5.81 amp
Dimensions: 1650 x 951 x 46mm
Solar cells with solid aluminium-frame
1 pc. 10m cable with plug for solar panel

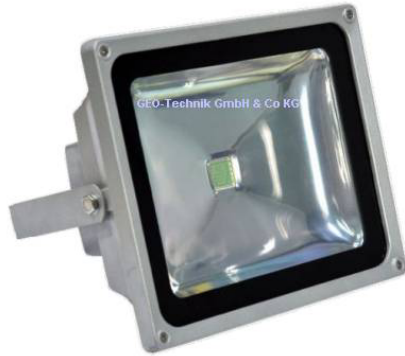
Power controller:

60A controller
with PV input socket
10 lamp output connectors 12V (for the included lamp cables)
2 output connectors 24V for external devices (TV, reffridgerator, fan)
5 USB outlets 5V for cellphone charging
including 5 adaptor cable sets for all common mobile phone models.
with cigarette lighter socket for small power inverter
with 3 fuses for separated current circuits and higher safety
voltmeter for battery voltage display
System voltage 24V
10 pcs. AGM longlife battery 12V/100Ah
Capacity: 12,000 Wh
Stable steel box
S-SOLAR88-9

Solar Working Lights and Building Site Lighting



Solar Lighting for Market Stall with 2 LED Floodlights



Independent photovoltaic solar lighting set for market stall with LED spotlights. No power connection required.
S-SOLAR89-2

Complete photovoltaic system package with 2 bright LED spotlights, light switch, solar module, battery and charge controller. During the day when the sun is shining or when the sky is overcast, the battery charges itself via the solar module. In dark weather or in the evening, the lighting can be switched on. The light intensity corresponds to about 2 80 Watt halogen spotlights. We supply sufficient cables and an easy-to-understand connection diagram for simple installation. The operating time is up to 14 hours with a fully charged battery. With the additional battery, available as an accessory, you can extend the self-sufficient lighting time to 28 hours. In rain and bad weather, recharging by the solar module is limited. In this case, the battery should be recharged overnight using a small charger. On request, we can deliver with other luminaires of your choice or we can put together larger systems for you. The LED floodlights are very durable and robust and can withstand rough handling during assembly and dismantling. Dimensions of the LED floodlights only approx. 11cm x 8cm

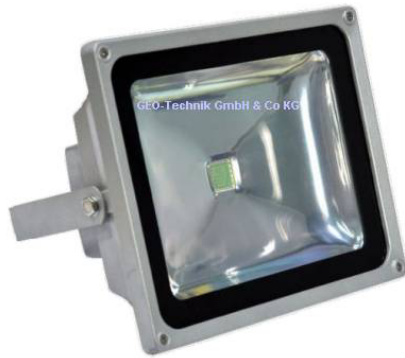
Scope of delivery:
1 monocrystalline solar module 200W, sealed and hailproof, life expectancy approx. 20 years.
The high-quality solar cell technology also guarantees charging on cloudy days.
Module dimensions: approx. 1500 x 900 x 35mm.
Mounting bracket for solar module,
2 bright LED floodlights,
(alternatively with other lights of your choice at extra charge).
1 high-performance solar gel battery 12 volt maintenance-free (no car battery because of the short service life with frequent discharge).
1 solar charge controller.
Wall switch,
13 m cable
Weight: 39 kg

Solar Lighting for Sales Stand with 4 LED floodlights

Independent solar lighting set for sales stand with LED spotlights. No power connection required.
S-SOLAR89-4



Solar Lighting for Market Stall with 2 LED Floodlights



Two mobile LED spotlights with battery in a wheeled transport case. With solar module - no power connection required. For market stall and sales trolley.
S-SOLAR89M

Complete package with 2 bright LED spotlights, solar panel, battery and cable.

During the day when the sun is shining or the sky is overcast, the battery charges itself via the solar module.

In dark weather or in the evening, the lighting can be switched on.

The light intensity corresponds to about 2 80 Watt halogen spotlights.

To set up, remove the two spotlights from the box, clamp them to the market umbrella or canopy and plug the cables into the box.

The solar module is set up, turned towards the sun and the cable is also plugged into the box. - Done

The operating time is up to 14 hours with a fully charged battery.

With the additional battery, available as an accessory, you can extend the self-sufficient lighting time to 28 hours.

In rain and bad weather, recharging by the solar module is limited. In this case, the battery should be recharged overnight using a small charger.

On request, we can deliver with other luminaires of your choice or we can put together larger systems for you.

The LED floodlights are very durable and robust and can withstand rough handling during assembly and dismantling.

Dimensions of the LED floodlights only approx. 11cm x 8cm

Scope of delivery:

Transport box with battery and charge controller.

1 monocrystalline solar module 200W hailproof with stand. Life expectancy approx. 20 years.

The high-quality solar cell technology also guarantees charging on cloudy days.

Module dimensions: approx. 1500 x 900 x 35mm.

2 bright LED floodlights,

1 high-performance solar gel battery 12 volts maintenance-free (no car battery because of the short service life with frequent discharge).

1 solar charge controller.

13 m cable

Weight: 39 kg

Photovoltaic Off-Grid Power Systems with Battery



Solar Photovoltaic Power System Kit 230V 500W



PV solar power generation Island system with solar module and inverter 500 W for operating TV, drill, small pump, lighting, etc. S-SOLAR90

Solar-powered power supply system for generating 12V DC and 230V AC voltage.
Areas of application: Vineyard, gazebo, allotment garden, alpine hut, small pond pump, animal stable ...
In order to provide electrical energy even at night or under cloudy skies, the system is equipped with rechargeable batteries.

Energy storage:
Solar battery AGM longlife.
Capacity: 660 WH
Voltage: 12V
Operating time with fully charged battery 5 hours at 100 W continuous load (or 10 hours at 50 W continuous consumption / 10W continuous operation).
The higher the consumption, the shorter the operating time will be.
We recommend switching on the inverter only when necessary to avoid discharging the battery too quickly.

Inverter:
Output voltage: 230V 50 Hz
Single-phase
Modified sine wave
Continuous load: 500 W
Short-term peak load: (starting current for motors): 1000 W
Efficiency: 98
Short-circuit protection and overload cut-off.
Standby power consumption: only 2W
Temperature range: 0 - 55°C
Housing: aluminium
Dimensions: Very compact: L 200mm, W 80mm, H 64mm.
The inverter must be placed indoors or protected from rain.

Charge controller:
With overcharge protection and deep discharge protection.
Charging current: 10A

Solar panel:
Monocrystalline
Power: 150Wp
Efficiency: 18%.
Sealed and hailproof,
Life expectancy: approx. 25 years.
The high-quality solar cell technology also ensures charging on cloudy days.
Dimensions: approx. 832 x 538 x 35mm

The system is delivered ready for connection and consists of the following components:
1 solar module,
1 inverter
1 solar battery
Mounting bracket for solar module for mounting on a flat roof or slightly sloping roof.
5 metre cable to the solar modules.
Battery cable
Mounting instructions

Batteries and inverters should not be installed in living areas. overnment !
Weight: 46,1 kg



Extended PV Solar Power System Kit 230V 500W



PV solar power generation Island system with solar module and inverter 500 W for operating refrigerator, TV, etc.
S-SOLAR90B

Solar-powered power supply system for generating 12V DC and 230V AC voltage.

Areas of application: Vineyard, arbour, allotment garden, alpine hut, water pump, animal stable ...

In order to provide electrical energy even at night or when the sky is overcast, the system is equipped with rechargeable batteries.

Energy storage:

Solar battery AGM longlife.

Capacity: 1.2 KWH

Voltage: 12V

Operating time with fully charged battery 5 hours at 200 W continuous load (or 10 hours at 100 W continuous consumption / 18W continuous consumption).

The higher the consumption, the shorter the operating time will be.

We recommend switching on the inverter only when necessary to avoid discharging the battery too quickly.

Inverter:

Output voltage: 230V 50 Hz

Single-phase

Modified sine wave

Continuous load: 500 W

Short-term peak load (starting current for motors): 1200 W

Efficiency: 98

Short-circuit protection and overload cut-off.

Standby power consumption only 2W

Temperature range: 0 - 55°C

Housing: aluminium

Dimensions: Very compact: L 200mm, W 80mm, H 64mm.

The inverter must be placed indoors or protected from rain.

Charge controller:

With overcharge protection and deep discharge protection.

Charging current: 14A

Solar panel:

Monocrystalline,

Output: 180Wp

Efficiency: 197%.

Sealed and hailproof,

Life expectancy approx. 25 years.

The high-quality solar cell technology also ensures charging on cloudy days.

Dimensions approx. 1460 x 664 x 35mm

The system is delivered ready for connection and consists of the following components:

1 solar module

1 charge controller

1 inverter

1 solar battery

Mounting bracket for solar module for mounting on a flat roof or slightly sloping roof.

6 metre cable to the solar modules.

Battery cable

Mounting instructions

Batteries and inverters should not be installed in living areas.

Weight: 46,1 kg



Solar Photovoltaic Off-Grid System 230V 1000W

PV solar power generation Island system with solar module and inverter 1000 W for operating lighting and electrical appliances.
S-SOLAR91R








Solar Photovoltaic Power Kit 230V 1000W Sine

PV solar power generation Island system with solar module and inverter 1000 Watt.

Pure sine wave voltage 50Hz for operating sensitive electrical and electronic devices.

With automatic switchover to the mains, if available.

S-SOLAR91S

| | | |
|---|---|---|
|  | <p>Solar Photovoltaic Power System 230V 2kW</p> | <p>Solar PV off-grid kit to generate 230 volt 2000 watt for supply of sensitive electrical or electronic devices. S-SOLAR92</p> |
|  | <p>Off-Grid Solar Power Generation System 230V 3kW</p> | <p>Independent power generation. Solar power island system with solar modules, batteries and hybrid inverter 230 Volt 3000 Watt. Pure sine wave voltage 50Hz for operating sensitive electrical and electronic equipment. With automatic switchover to the mains, if available. S-SOLAR93</p> |
|  | <p>Off-Grid Solar Power System 230V 3kW Continuous</p> | <p>Independent photovoltaic power generation. Solar power island system with solar modules, batteries and hybrid inverter 230 Volt 3000Watt. Pure sine wave voltage 50Hz for operating sensitive electrical and electronic devices. For long-term operation. With automatic switchover to the mains, if available. S-SOLAR93D</p> |
|  | <p>Solar Photovoltaic Off-Grid System 230V 1000W</p> | <p>PV solar power generation Island system with solar module and inverter 1000 W for operating lighting and electrical appliances. S-SOLAR94-1</p> |
|  | <p>Off-Grid Solar Power System 230V 5kW</p> | <p>Photovoltaic energy supply. Complete kit with PV-modules, batteries and inverter 230 volt. S-SOLAR95</p> |



Solar Power Generator System 6 kW



Independent photovoltaic power supply. Isle system for outdoor use in abroad area. Complete package with PV-modules, batteries and inverter 230 volt. S-SOLAR95-1

Solar powered PV off-grid energy system for generating of 230V / 400V AC voltage 50 Hz 3 phases.

For use in areas without electricity. (We supply also photovoltaic plants for grid feeding at a lower price)

This system is equipped with rechargeable batteries, in order to provide electrical energy even at night or when the sky is overcasted.

Solar modules:

Solar module power at sunshine: 6000 watts peak

Monocrystalline solar modules,

Power: 300Wp,

Efficiency: 16% - 17%

Sealed and sandstorm proof,

Life expectancy approx. 25 years.

The high-quality solar cell technology also ensures charging in a cloudy sky.

The required area for mounting the solar modules is approx. 45 sqm.

Energy storage:

The energy storage is available in 3 stages:

12 / 20 / 40 pcs. solar batteries AGM longlife.

Basic version - 29 kWh (8 hours continuous operation at 3500W

consumption or 29 hours at 1 kW)

Option 48 kWh (13 hours continuous operation with 3500 Watt consumption)

Option 96 kWh (26 hours continuous operation at 3500 W consumption)

Voltage: 48V

The higher the consumption, the faster the memory will be unloaded.

Continuous operation 0.6 kW - 1.5 kW (Average consumption day and night, depending on the weather, sun and region)

Inverter:

Combined power supply for photovoltaic, mains and battery operation.

The battery charging can be done via the power supply network or via the solar modules or diesel generator.

Charger with MPPT Maximum PowerPoint Tracking for up to 30% more power from the solar modules.

Output voltage: 230V

Three Phase

Frequency: 50 - 60Hz, auto-sensing, pure sine wave

Continuous load: 7200 W

Short-term peak load (starting current for motors): 9 KW

Efficiency: 98%

Short circuit protection and overload cut-off.

Solar charger with overcharge protection and deep discharge protection.

Standby power consumption only 6W

Temperature range: 0 - 55 ° C

Housing: aluminum

Dimensions: 3 individual units, each 460mm x 300 x 120mm

The system is delivered ready for connection and consists of the following components:

20 solar modules,

3 Inverter for wall mounting

12 solar batteries

Rails and mounting brackets for solar modules at a pitched roof, (other installation options on request)

Cables and terminals.

Assembly Instructions

This pv system can be funded by governmental funds !

Inverter and batteries should be installed in an enclosed space (basement or attic).

The energy yield corresponds approximately to the annual electricity consumption of a 1-family house with 5 persons in Germany.

When ordering, we need informations about your roof: angle of inclination and covering, e.g. Frankfurter pans, trapezoidal sheet metal, etc., so that we can supply the appropriate module brackets.

Weight: 2900 kg



Solar Off-Grid Energy System 10kW

Independent electric power supply. Isle system for 2 family house. Photovoltaic electricity with PV-modules, batteries and inverter 230 volt. S-SOLAR95-4

Mobile Solar Generators



Mobile Solar Power Trailer Generator 2 KVA



Photovoltaic power generation. Mobile solar power system as trailer with solar modules, batteries and inverter 230 Volt 200W.
Production article - Only for projects - Minimum order quantity 4 pieces.
S-SOLAR98-5

Solar-powered PV energy supply island system for generating 230V AC voltage 50Hz up to 1.3kW.

Robust power generator island system in a folding trailer.

The system is charged in the open field or in a place with plenty of sunlight.

The modules are folded out for this purpose.

To draw power, the photovoltaic generator can be transported to the site of operation in the closed state.

Two fused Schuko plug connections with hinged lid.

Possible applications: Areas with unsecure power supply, events, residential buildings with frequent power interruptions, rescue operations, THW, Red Cross, military or police operations.

Technical data:

Charging time in direct sunlight 27 hours,

Charging time in diffuse sunlight 48 hours,

Voltage: 230V / 50Hz.

Continuous load max. 1600 Watt

Peak load max. 2000 VA / 10 sec.

Outputs:

2 x earthed socket with screw connection 10A

2 automatic circuit breakers 10A,

1 residual current circuit breaker 30mA.

Pure sine wave 50 Hz +/- 0.2%.

Distortion factor: 3%

Efficiency 85 - 90%

No-load current consumption 0.1A / 24V

Low battery alarm function.

Protection against overload, wrong polarity or short circuit.

The generator has a mains input, for recharging the batteries or for regular supply.

Power capacity 3.6 KWh or 7.2 KWh depending on equipment.

Operating time with fully charged batteries and closed solar panels:

24 hrs. at 130 W continuous consumption,

10 hrs. at 300 W continuous consumption,

3 hours at 1000 W continuous consumption.

The lower the consumption, the longer the operating time will be.

PV modules:

Module power: 1000 watts.

Sealed and hail-resistant,

Life expectancy approx. 25 years.

High-quality solar cell technology ensures charging even on cloudy days.

Dimensions:

Length 240cm, width 154cm, height 125cm.

When unfolded: length 405cm, width 154cm, height 125cm.

The solar modules are set in aluminium frames.

The fold-out construction is made of galvanised steel.

The generator trailer is made of sheet steel with a scratch-resistant colour coating.

The solar system is available with 2 inverters at an extra charge:

Main inverter 3kW 1-phase 230V continuous output

and second inverter 1kW for all important consumers (telecommunication, computer, lighting etc.).

When the battery charge drops, the main inverter switches off (dispensable consumers, such as heating, air conditioning, refrigerator).

Scope of delivery:

Mobile trailer with solar modules,

Solar charge controller,

Maintenance-free high-performance solar lead gel batteries, long-life type.

Weight: 244 kg



Mobile Solar Power Trailer Generator 3 KVA



Independent Photovoltaic off-grid power supply generator 230V with PV modules, batteries and inverter 230 volt 3 kW.
Produced on demand. MOQ 4 pcs.
S-SOLAR98-6

Solar-powered PV energy supply island system for generating 230V AC voltage 50Hz up to 2.4kW.
Robust power generator island system in a folding trailer.
The system is charged in the open field or in a place with plenty of sunlight. The modules are folded out for this purpose.
To draw power, the photovoltaic generator can be transported to the site of operation in the closed state.
Two fused Schuko plug connections with hinged lid.
Possible applications: Areas with unsecure power supply, events, residential buildings with frequent power interruptions, rescue operations, THW, Red Cross, military or police operations.

Technical data:

Charging time in direct sunlight 27 hours,
Charging time in diffuse sunlight 48 hours,
Voltage: 230V / 50Hz.
Maximum output 2400W
Continuous load max. 2400 Watt
Peak load max. 3000 watts / 10 sec.

Outlets:

2 x earthed socket with screw connection 10A,
2 automatic circuit breakers 10A,
1 residual current circuit breaker 30mA.
Pure sine wave 50 Hz +/- 0.2%.
Distortion factor: 3%
Efficiency 85 - 90%
No-load current consumption 0.1A / 48V
Low battery alarm function.
Protection against overload, wrong polarity or short circuit.
The generator has a mains input, for battery recharging or regular supply.
Power capacity: 7.2 KWh depending on equipment.
Operating time with fully charged batteries and closed solar panels:
24 hrs. at 250 W continuous consumption,
10 hrs. at 600 W continuous consumption,
3 hours at 2000 W continuous consumption.
The lower the consumption, the longer the operating time will be.

Dimensions: Length 240cm, width 154cm, height 125cm.

When unfolded: length 405cm, width 154cm, height 125cm.

The solar modules are set in aluminium frames.

The fold-out construction is made of galvanised steel.

The generator container is made of sheet steel with a scratch-resistant colour coating.

The solar system is available with 2 inverters at an extra charge:

Main inverter 3kW 1-phase 230V continuous output
and second inverter 1kW for all important consumers (telecommunication, computer, lighting etc.).

When the battery charge drops, the main inverter switches off (dispensable consumers, such as heating, air conditioning, refrigerator).

PV modules:

Module output: 1480 watts.

Sealed and hail-proof,

Life expectancy approx. 25 years.

The high-quality solar cell technology also ensures charging on cloudy days.

Scope of delivery:

Mobile trailer with solar modules,

Solar charge controller,

Maintenance-free high-performance solar lead gel batteries, long-life type.

Weight: 379 kg



Mobile Solar Power Trailer Generator 5 KVA



Independent Photovoltaic off-grid power supply generator 230V with PV modules, batteries and inverter 230 volt 5 kW.
Produced on demand. MOQ 4 pcs.
S-SOLAR98-7

Solar-powered PV energy supply island system for generating 230V AC voltage 50Hz up to 2.4kW.
Robust power generator island system in a folding trailer.
The system is charged in the open field or in a place with plenty of sunlight. The modules are folded out for this purpose.
To draw power, the photovoltaic generator can be transported to the site of operation in the closed state.
Two fused Schuko plug connections with hinged lid.
Possible applications: Areas with unsecure power supply, events, residential buildings with frequent power interruptions, rescue operations, THW, Red Cross, military or police operations.

Technical data:
Charging time in direct sunlight 27 hours,
Charging time in diffuse sunlight 48 hours,
Voltage: 230V / 50Hz.
Maximum output 2400W
Continuous load max. 2400 Watt
Peak load max. 3000 watts / 10 sec.

Outlets:
2 x earthed socket with screw connection 10A,
2 automatic circuit breakers 10A,
1 residual current circuit breaker 30mA.
Pure sine wave 50 Hz +/- 0.2%.
Distortion factor: 3%
Efficiency 85 - 90%
No-load current consumption 0.1A / 48V
Low battery alarm function.
Protection against overload, wrong polarity or short circuit.
The generator has a mains input, for battery recharging or regular supply.
Power capacity: 7.2 KWh depending on equipment.
Operating time with fully charged batteries and closed solar panels:
24 hrs. at 250 W continuous consumption,
10 hrs. at 600 W continuous consumption,
3 hours at 2000 W continuous consumption.
The lower the consumption, the longer the operating time will be.

Dimensions: Length 240cm, width 154cm, height 125cm.
When unfolded: length 405cm, width 154cm, height 125cm.
The solar modules are set in aluminium frames.
The fold-out construction is made of galvanised steel.
The generator container is made of sheet steel with a scratch-resistant colour coating.

The solar system is available with 2 inverters at an extra charge:
Main inverter 3kW 1-phase 230V continuous output
and second inverter 1kW for all important consumers (telecommunication, computer, lighting etc.).
When the battery charge drops, the main inverter switches off (dispensable consumers, such as heating, air conditioning, refrigerator).

PV modules:
Module output: 1480 watts.
Sealed and hail-proof,
Life expectancy approx. 25 years.
The high-quality solar cell technology also ensures charging on cloudy days.

Scope of delivery:
Mobile trailer with solar modules,
Solar charge controller,
Maintenance-free high-performance solar lead gel batteries, long-life type.
Weight: 379 kg

Solar Lighting for Parking Lot, Carport, Bus Shelters



Solar Lighting System for Parking Lot



Complete photovoltaic package for Parking Buildings with PV-modules, batteries and LED lights.
S-SOLARP6

Ready for connection with construction plan and:
Monocrystalline solar modules, sealed and hail-resistant, life expectancy approx. 25 years.
The high-quality solar cell technology also guarantees charging on cloudy days.
1 MPPT solar charge controller with overcharge protection and deep discharge protection.
Battery storage system AGM 24 Volt.
Rails and mounting clamps for solar modules on the façade, cables and clamps.
Operating time with fully charged batteries 24 hrs.
The required area for mounting the solar modules is approx. 8 sqm (1m * 8m).
Including control cabinet.

When ordering this package, we need exact details of your roof: angle of inclination and roofing, e.g. Frankfurter tiles, etc., so that we can supply the appropriate brackets to hold the modules securely in storms.
Weight: 772,5 kg

Photovoltaic On-Grid Systems



Solar Photovoltaic Balcony Power System Kit 230V 300W



PV solar power generation Island system with solar module 360W and inverter 295 W for direct grid injection. S-SOLBK30

Solar-powered power supply system for generating 230V alternating voltage. The system must be registered with the energy supplier. There are no operating costs or feed-in costs.

Inverter:

With reactive power feed-in (according to VDE-AR-N 4105)

Output voltage: 230V 50 Hz

Single-phase

Modified sine wave

Continuous load: 290 W

Short-term peak load: 295 W

Efficiency: 98

Short circuit protection and overload cut-off.

Standby power consumption: only 2W

MPPT efficiency: 99

Noise generation: < 25dB very quiet

Cooling: convection

Ambient temperature -25°C to +55°C

Housing: aluminium

Protection class: IP65

Dimensions: Very compact: L 200mm, W 80mm, H 64mm

Solar modules:

Monocrystalline

Power: 2 x 180Wp

(not expandable)

Efficiency: 18%

Sealed and hailproof,

Life expectancy: approx. 25 years.

The high-quality solar cell technology also ensures charging on cloudy days.

Dimensions: approx. 1450 x 538 x 35mm

The system is delivered ready for connection and consists of the following components:

2 PV solar modules,

1 inverter


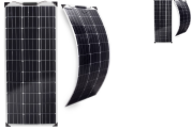
cables to the solar modules.

Assembly instructions


Mounting material for solar module for attachment to balcony railing, wall, roof or on the ground can be found in the accessories.





Weight: 46,1 kg

Photovoltaic Solar Modules

| | | |
|---|--|---|
|  | <p>Flexible Solar Panel 12V 100W</p> <p>Flexible solar panel 100 Watt monocrystalline for boat, camping and mobile applications. Photovoltaic module 100 Wp.</p> | <p>Ideal for campers, boats, vehicles, odd-shaped surfaces or temporary use. Solar cell hail-resistant with UV-resistant seal. High-quality module technology ensures charging even on cloudy days. Efficiency: > 20% 32 cells with 125 x 125 mm size Life expectancy approx. 10 years. For 12 Volt system voltage. Module nominal voltage 18.3V No-load voltage 22.5V Nominal cell current: 5.48A @ max. 50°C Short-circuit current: 5.92A Operating temperature: -40°C to +80°C Dimensions: Approx. 1153 x 537 x 2.5mm On highly stable carrier foil with 4 eyelets for bracing. Bending max. 50°. Stable connection box with 2 connection cables 90cm with connectors. S-SOLF1210</p> |
|  | <p>Semi Flexible Solar Panel 12V 100W</p> <p>Flexible solar panel 100 Watt monocrystalline. Reinforced with thin aluminium sheet. For boat, camping and mobile applications. Photovoltaic module 100 Wp. Only a few in stock.</p> | <p>Ideal for camping mobile, boat, vehicles, odd surfaces or temporary use. Solar cell hail-resistant with UV-resistant sealant. This modern cell technology has a high degree of efficiency and allows charging also at cloudy weather. Efficiency: > 17% Lifespan aprx. 10 years For 12 Volt system voltage. Max. voltage 500 V Nominal voltage 18.2V Idle voltage 21.5V Nominal current 5.49A Short circuit current 6.01A Inverse current: max. 15A Operating temperature: -40°C bis +85°C Surface: Plain soft PC Dimensions: Approx 1240 x 515 x 2mm With 4 stable eyelets for bracing. Bending angle: max. 30° Robust junction box with 2 cables 70cm and connectors. S-SOLFA1210</p> |

Solar Charge Controllers

| | | |
|---|---|--|
|  | <p>Solar Battery Charge Controller 14A 12V</p> | <p>Battery charge controller in metal housing IP68, for lead or lead gel batteries. S-SOLR14</p> |
| <p>Solar Battery Charge Controller MPPT 20A</p> | | <p>PV charge controller with automatic voltage adaption to have up to 30% more solar energy. S-SOLR31</p> |
| <p>Solar Charge Controller MPP Tracker 30A 12V-24V</p> | | <p>PV charge controller with automatic voltage elevation to have up to 30% more solar energy. S-SOLR32</p> |

| | | |
|---|---|--|
|  | <p>Solar Charge Controller MPP Tracker 60A negative</p> | <p>Battery charge controller with MPP tracker for up to 30% higher energy production from the solar module. For battery system 12V - 48V. S-SOLR34N</p> <p>Intelligent MPP (Maximum Power Point Tracking): The efficiency of the solar modules is utilised up to 30% better. Due to the automatic voltage adjustment, the maximum possible power is always taken from the solar cells. This means that the maximum efficiency of the solar panel is always exploited. Charge status display with LCD display Load status display Automatic load switching at low battery voltage Battery voltage selectable: 12V, 24V, 36V, 48V Module voltage: max. 145V Max. Battery charging current 60A Max. load output Load output: 20A Max. Module power: 2700W/ 24V or 4000W/ 48V Battery. Integrated temperature compensation Interface RS232 and RS485 Concealed terminals (up to 16 mm²) Fully electronically protected Protection class: IP32 Dimensions: 285*205*93mm Weight: 3,8 kg</p> |
|  | <p>Solar Charge Controller MPP Tracker 80A 12V - 60V</p> | <p>PV charge controller with automatic voltage elevation to have up to 30% more solar energy. S-SOLR35</p> <p>Intelligent MPP (maximum power-point tracking): up to 30% more efficient power production of the solar modules. Charge state visualisation with LCD Display. Load control, Automatic power-off at low battery power, Battery voltage selectable: 12V, 24V, 36V, 48V Module voltage: max. 150V max. module current 80 amp Integrated temperature compensation. Covered connection terminals (max. 16 mm²) Completely electronic protected Weight: 6,1 kg</p> |
|  | <p>Remote Programmer for Solar Regulator WiFi</p> | <p>For changing the lighting times according to your wishes. Universal programmer for WLAN-controlled luminaire control systems. S-SOLS29-5</p> <p>With lights test function, Setting the lighting times blocks Setting the dimming 10 - 100% Reading the current lights and battery parameters Reading the memory for the last days. Required for operation: 2x AA battery Weight: 0,075 kg</p> |
|  | <p>IR Remote Programmer for Solar Regulator</p> | <p>For changing the lighting times according to your wishes. Universal programmer for infrared luminaire controls. S-SOLS29-A</p> <p>With lights test function, Setting the lighting times blocks Setting the dimming 10 - 100% Reading the current lights and battery parameters Reading the memory for the last days. Required for operation: 2x AA battery Weight: 0,075 kg</p> |

Solar lighting for garden shed, stable, weekend house



Solar Lighting System for Home and Hut 20W

Lighting system with solar modules for small houses and huts in Africa, Asia and South America.
S-SOLUG86-2

Complete photovoltaic system package with lamps, solar module, battery and cables.

Ready to plug in - quickly assembled - immediately ready for use.

System voltage: 12V
Capacity: 200 Wh
Solar panel 25Wp polycrystalline

Available with two different battery characteristics:
AGM battery 12V/17Ah maintenance-free (service life: approx. 5 years)
or (on request) LiFePO4 battery 12V 17Ah (service life: approx. 10 years)

Solar charge controller 12V/5A,
3 pcs. LED lamps 12V / 6W
3 sets lamp holder E27 & chain switch
5m cable 8 m cable with plug for solar panel
Socket for PV input & lights
with 5V USB connection for charging a mobile phone
with fuse for full protection

Battery box:
Steel housing
Dimensions: L240 x W130 x H215mm

Each system is packed in 1 carton
With carton: 41 x 26.5 x 35.5 cm 6.5 kg
30 sets / pallet, 1.35 cbm, 325 kg

Accessories at extra charge: FM radio
Weight: 8,5 kg



Solar Power and 6 LED Lighting for small Home



Solar power supply system 70w with 6 LED lamps for cottage or house in Africa, Asia or South America.
S-SOLUG86-5

Complete package with LED lamps, solar panel, battery and cables.
Ready to plug in - quickly put together - immediately ready for use.

System voltage: 12V
Battery capacity: 600 Wh

Scope of delivery:
Solar panel 70Wp polycrystalline.
Available with two different battery characteristics:
LiFePO4 battery 12V 50Ah (service life: approx. 10 years)
Stable control box with solar charge controller and 12V/10A battery included.
6 pcs. LED lamps 12V / 6W
3 Set lamp holder E27 & chain switch and 5m cable
3 Set lamp holder E27 & chain switch and 10m cable
8m cable with plug for solar panel

steel housing:
with solar controller and battery
PV input
6 lamps plug-in connections
with 5V USB output for charging a mobile phone
with fuse for full protection
with voltmeter for battery voltage indication
Weight: 17,5 kg



Solar lighting 6 lamps and power for small house



Lighting with solar panel 200W for homes in Africa, Asia and South America. S-SOLUG86-6

Complete package with LED lamps, solar panels, batteries and solar controller.
 Capacity: 2400 Wh
 Easy to install, including set-up plan and:
 solar panel 200Wp monocrystalline
 AGM longlife battery 12V/150Ah maintenance-free (life time: aprx. 5 years)
 Stable control box with solar charge controller 12V/15A and included batteries.
 6 pcs. 12V/6W LED bulbs
 3 pcs. E27 light fitting & chain switch for DC light with 5m cable
 3 pcs. E27 light fitting & chain switch for DC light with 10m cable
 8m solar cable with plug

Steel power box:
 with PV input socket
 6 pcs. lamp output connectors
 USB outlet 5V for cellphone charging including adaptor cable for all common mobile phone models.
 with cigarette light socket for small power inverter
 Fuse for full protection
 voltmeter for battery voltage display
 Weight: kg

Solar Power Supplies for Water Pumping



Photovoltaic Solar Water Heating System 1kW

Hot water heater with solar energy through PV modules. Cheaper than solar thermal and easier in installation. S-SOLW410



Solar pump for deep well 70m 1250 L/h



Photovoltaic solar water pump Submersible pump for deep wells up to 77 metres. For drinking water or irrigation.
S-SOLW644

Complete system for water supply in equatorial and sunny countries. This pump delivers drinking water from a pump shaft up to 60 metres deep to the surface. The pump is lowered into the shaft or pipe and remains under water. 2 water level sensors prevent the pump from running dry if it is not in the water. The included control unit protects the pump and ensures maximum performance during solar operation even when the sunlight is reduced. The included switch can be used to turn the pump on and off as needed. Pumping should mainly be done during the day to avoid deep discharging the batteries. The enclosed solar modules ensure that the batteries are charged during the day.

Pump data:

Stainless steel screw pump with very long, maintenance-free service life.
Multi-stage submersible pump.
Maximum delivery depth: 70 metres
Maximum delivery rate: 1250 litres per hour at 30m delivery head.
Cylindrical design of the pump: diameter 76mm, height 540mm
Material: stainless steel, with dry-running protection
Water connection: 1".
Maximum sand content in water: 0,1%
Pump voltage: 230V AC 50Hz
Pump power: 250W
Dimensions: Diameter 70mm, height 960mm

Solar panels:

The high quality solar modules are monocrystalline for maximum output even in slightly overcast conditions. They are weatherproof and sealed dustproof, as well as hailproof, life expectancy approx. 25 years.
Module output: 530 Wp
The area of the solar modules is approx. 2.5 sqm.

Control system:

Control with MPP tracker for 30% more energy yield.
Max. Input voltage 45 volts DC (open-circuit voltage of the solar module!)
On/off switch via manual switch
Automatic switch-off in case of undervoltage
Max. output current 1.1 A
Intrinsic current consumption approx. 25mA
Ambient temperature range: 0°C to +60°C
Output short-circuit protected
Overtemperature cut-off at approx. 80°C

Battery system:

Lead-gel 24V
Capacity: 1080 Wh

Included in the set:

Robust stainless steel screw pump
Solar panels with sturdy aluminium frame.
50 metres of pump hose
100 metres of stainless steel cable
Control unit, hand switch, cable and clamps.
Weight: 100 kg



**Solar pump for deep well 80m
4m³/h**



Solar powered submersible water pumping for 80 meters deep wells, 4m³/h.
For drinking water or irrigation
S-SOLW647

Complete system for water supply in equatorial and sunny countries. This pump delivers drinking water from a pump shaft up to 80 metres deep to the surface.
The pump is lowered into the shaft or pipe and remains under water. Suitable for sand levels up to 0.1%.
2 water level sensors prevent the pump from running dry if it is not in the water.
The supplied control unit protects the pump and ensures maximum performance during solar operation even with reduced solar radiation.
When the sun shines, the pump starts automatically and delivers continuously until sunset.
With the included switch, the pump can also be switched on and off only when needed.
The high-quality solar modules are monocrystalline for maximum performance even in slightly overcast conditions.
They have sturdy aluminium frames, are weatherproof and sealed dustproof, as well as impact resistant, life expectancy approx. 25 years.

General technical data:
Maximum conveying depth: 80 metres
Nominal delivery depth: 70 metres
Maximum delivery rate: 4000 litres per hour
Delivery rate at 40 metres: 2900 litres per hour

Pump data:
Stainless steel screw pump with very long, maintenance-free service life.
Built-in non-return valve
Cylindrical design: Diameter 98,5mm, height 540mm
Material: Stainless steel, with dry-running protection
Max. Sand accumulation: 0.1%
Water outlet: 1 1/4" internal thread
Pump voltage: 230V AC 50Hz
Pump power: 750W

Solar Power Supply Data:
Control with MPP tracker for 30% more energy yield.
Max. Input voltage 45 Volt DC (open circuit voltage from solar module!)
Automatic frequency control for speed control, for optimum energy utilisation depending on the solar module voltage.
Automatic switch-off in case of undervoltage
Max. output current 3.3 A
Own current consumption approx. 25mA
Ambient temperature range: 0°C to +60°C
Output short-circuit protected
Overtemperature cut-off at approx. 80°C
The area of the solar modules is approx. 5 sqm.

Included in the set:
Pump
4 solar modules with stable aluminium frames.
Erection triangles for mounting the modules on a flat surface.
80 metres of pump hose
Control unit, hand switch, cable and clamps.
Weight: 100 kg



**Solar pump for deep well 130m
5m³/h**



Solar powered submersible water pumping for 127 meters deep wells, 5.4m³/h. For drinking water or irrigation S-SOLW648

Complete water supply system for sunny countries near the equator, South America, Africa, desert countries. This pump delivers drinking water from a well with up to 127 meters depth to the surface. The pump is lowered into the shaft or into the tube and remains under water. 2 water level sensors prevents dry running of the pump, if this is not in the water. The included controller protects the pump and increases the voltage at reduced sun exposure. When the sun shines, the pump starts automatically and runs continuous until sunset. By the attached switch the pump can be controlled manually, if required. The high-quality monocrystalline solar panels are for maximum performance even on slightly overcast sky. They have sturdy aluminum frame, are sealed weatherproof and dustproof, and shock-resistant, life expectancy about 25 years.

General specifications:

Maximum water rising depth: 127 meters
Maximum flow rate: 5400 liters per hour (900 gph)
Flow rate at 105m depth: 2900 lph

Pump specifications:

Cylindrical design of the pump with 95mm diameter, length 1280mm.
Material: Stainless steel
Suitable for sand content up to 0.1%
Water connection: 1 1/4"
Built-in check valve.

| | | | | | | | | | | | | | | | | | | | |
|-----------------|-----|-----|-----|-----|-----|----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|------|------|
| Volume | | | | | | | | | | | | | | | | | | | |
| l/Min. | 0 | 10 | 20 | 30 | 40 | 50 | 60 | 70 | 80 | 90 | 100 | 110 | 120 | 130 | 140 | 150 | 160 | 170 | 180 |
| m³/h | 0 | 0,6 | 1,2 | 1,8 | 2,4 | 3 | 3,6 | 4,2 | 4,8 | 5,4 | 6 | 6,6 | 7,2 | 7,8 | 8,4 | 9 | 9,6 | 10,2 | 10,8 |
| Height in meter | | | | | | | | | | | | | | | | | | | |
| m | 130 | 126 | 122 | 115 | 105 | 96 | 84 | 69 | 54 | 42 | 30 | 18 | 6 | | | | | | |

Solar power supply specifications:

Maximum module voltage 45V DC (at open circuit)
Turn-on voltage for pump system from 18V to 32V adjustable
Cut-off approx. 28V -
Max. Pump power 1500W
max. Output current 11 A
Controller current consumption: 25mA
Ambient temperature range: 0° C to +60° C
Output is short circuit protected
Overtemperature shutdown at about 80° C.
The Module surface is approximately 15 square meter.

The set includes:

Rugged pump
10 Solar modules with sturdy aluminum frame.
130 meter pump hose
Control unit, manual switches, cables and terminals.
Ready to mount system including set-up plan.
Weight: 100 kg



Solar Well Pump 30m 600 L/h



Solar WaterPump Submersible pump 30 - 50 metres deep. For drinking water or irrigation.
S-SOLW650

Complete system for water supply in equatorial and sunny countries. This pump delivers drinking water from a pump shaft up to 30 metres deep to the surface. The pump is lowered into the shaft or pipe and remains under water. A circuit breaker prevents the pump from running dry if it is not in the water. The control unit supplied protects the pump and provides a voltage increase during solar operation, e.g. in case of reduced irradiation. When the sun shines, the pump starts automatically and pumps continuously until sunset. With the enclosed switch, the pump can also be switched on and off only when needed.

General technical data:
Nominal delivery depth: 30 metres
Maximum delivery depth: 50 metres
Maximum delivery rate: 600 litres per hour

Pump data:
Robust diaphragm pump
Cylindrical design: Diameter 95mm, height 340mm
Material: Stainless steel, with dry-running protection
Max. Sand volume: 0,1%
Water outlet: 1 1/4" internal thread
Pump voltage: 230V AC 50Hz
Pump power: 150W

Solar Power Supply Data:
The high quality solar panel is polycrystalline for high output even in slightly overcast conditions. With stable aluminium frame, weatherproof and dustproof sealed, as well as impact resistant, life expectancy approx. 25 years.
Power: 265W
Max. Input voltage 45 Volt DC (open-circuit voltage from solar module!)
Switch-off voltage approx. 28V - max. pump power 150W
Max. output current 5 A
Intrinsic current consumption approx. 25mA
Ambient temperature range: 0°C to +60°C
Output short-circuit protected
Overtemperature cut-off at approx. 80°C
The area of the solar module is approx. 1 sqm.

Included in the set:
Pump
Solar module
20 metres of 1/2 inch pump hose
Control unit, hand switch, cable and clamps.
Weight: 50 kg



Solar Well Pump 40m 3500 L/h



Photovoltaic solar water pump for deep wells up to 40 metres. For drinking water or irrigation.
S-SOLW653

Complete system for water supply in equatorial and sunny countries. This pump delivers drinking water from a pump shaft up to 40 metres deep to the surface.

The pump is lowered into the shaft or pipe and remains under water. 2 water level sensors prevent the pump from running dry if it is not in the water.

The control unit supplied protects the pump and provides a voltage increase during solar operation, e.g. in case of reduced irradiation. When the sun shines, the pump starts automatically and pumps continuously until sunset.

With the enclosed switch, the pump can also be switched on and off only when needed.

The high-quality solar modules are monocrystalline for maximum output even in slightly overcast conditions.

They have sturdy aluminium frames, are weatherproof and sealed dustproof, as well as impact resistant, life expectancy approx. 25 years.

General technical data:

Maximum conveying depth: 40 metres

Nominal delivery depth: 30 metres

Maximum delivery rate: 3500 litres per hour

Cylindrical design of the pump: diameter 98.5mm, height 540mm

Material: stainless steel, with dry-running protection

Water connection: 1".

Control with MPP tracker for 30% more energy yield

Max. Input voltage 45 Volt DC (open circuit voltage from solar module!)

Automatic frequency control for speed control, for optimum energy utilisation depending on solar module voltage.

Automatic switch-off in case of undervoltage

Pump voltage: 230V AC 50Hz

Pump output: 750W

Max. output current 3.3 A

Own current consumption approx. 25mA

Ambient temperature range: 0°C to +60°C

Output short-circuit protected

Overtemperature cut-off at approx. 80°C

The area of the solar modules is approx. 10qm

Included in the set:

Robust diaphragm pump

5 solar modules with sturdy aluminium frames.

35 metres of pump hose

Control unit, hand switch, cable and clamps.

Weight: 100 kg



**Solar Deep Well Water Pump
60m 2700 L/h**



Solar powered submersible water pumping for 60 meters deep wells. For drinking water or irrigation
S-SOLW655

Complete system for water supply in equatorial and sunny countries. This pump delivers drinking water from a pump shaft up to 60 metres deep to the surface. The pump is lowered into the shaft or pipe and remains under water. Suitable for sand levels up to 0.1%. 2 water level sensors prevent the pump from running dry if it is not in the water. The supplied control unit protects the pump and ensures maximum performance during solar operation even when the sunlight is reduced. When the sun shines, the pump starts automatically and delivers continuously until sunset. With the included switch, the pump can also be switched on and off only when needed. The high-quality solar modules are monocrystalline for maximum performance even in slightly overcast conditions. They have sturdy aluminium frames, are weatherproof and sealed dustproof, as well as impact resistant, life expectancy approx. 25 years.

Technical data:
Stainless steel screw pump with very long, maintenance-free service life.
Maximum pumping depth: 70 metres
Nominal delivery depth: 60 metres
Maximum delivery rate: 2700 litres per hour
Cylindrical design of the pump: diameter 98.5mm, height 540mm
Material: stainless steel, with dry-running protection
Water connection: 1".
Control with MPP tracker for 30% more energy yield
Max. Input voltage 45 Volt DC (open circuit voltage from solar module!)
Automatic frequency control for speed control, for optimum energy utilisation depending on solar module voltage.
Automatic switch-off in case of undervoltage
Pump voltage: 230V AC 50Hz
Pump output: 750W
Max. output current 3.3 A
Own current consumption approx. 25mA
Ambient temperature range: 0°C to +60°C
Output short-circuit protected
Overtemperature cut-off at approx. 80°C
The area of the solar modules is approx. 7sqm.

Included in the set:
Robust stainless steel screw pump
6 solar modules with stable aluminium frame.
70 metres of pump hose
Control unit, hand switch, cable and clamps.
Weight: 100 kg