

# SOLAR KIT MODEL: SISMA-1500



**1500 Solar PV Kit**  
**216 kWh per month PRODUCTION**  
**7200 Wh per day PRODUCTION**

| <i>Quantity</i> | <i>Description</i>  |
|-----------------|---|
| <b>6</b>        | <b>Solar panels 250W Polycrystalline</b>  |
| <b>1</b>        | <b>Solar Inverter 1600TL</b>  |
| <b>1</b>        | <b>Support structure for solar panels</b>   |
| <b>1</b>        | <b>20 m DC cables 1x5.6mm R1000 2 core PV panel to charge controller with thimble at ends</b> |
| <b>1</b>        | <b>5m AC cable 1x5,6mm R1000 2 core inverter to main breaker with thimble at ends</b>         |
| <b>1</b>        | <b>1 installation tool kit</b>  |

## **SYSTEM WARRANTY\*:**

Solar modules production: 25 years  
Module support structure: 25 years  
Inverters: 5 years standard, (extendable to 25 years)

## **Quality of Components:**

Manufactured in EU.  
All components in the kit are high quality with CE standard

## **Description**

SITECNO solar kits for hybrid system with diesel generator, batteries and grid are complete solutions which also provide energy in all unforeseen situations that may lead either by time, by circumstances of outage and any situation. It is a complete solution for saving your energy costs and fuel.

## **Kits advantages**

- Easy to organize the order through a unique code and provider
- Compatibility between all components secured
- Measurement of energy flows installation
- CE Highest quality components
- Support pre (Combiner Box) enclosures configured to facilitate mounting installation.
- Possibility of dimensioning variants references listed kits for other power settings (on request)

### ***Function of the system***

1. The place uses the solar energy produced by photovoltaic modules during the hours of sun, plus the excess energy store in the batteries.
2. The diesel generator is the last option when the load does not get solar energy, and there is load shedding in the grid. In these situations the location consumes energy from diesel generator.

### ***Modular system***

These systems are module type and can be installed as per your space and requirement. You can ask for additional services as state-of-the-art designing, drawings, engineering and installation of your projects.

Solar kits with modular system can be extended to MW projects

### ***Solar Kit Applications:***

- Schools
- Restaurants
- Gymnasium
- Electric vehicle charging stations
- Gardens
- Markets
- Administration buildings
- Hospitals
- Resorts
- Service centres
- Multi story buildings
- Shopping malls
- Hotels
- Scout camps
- Petrol Stations
- Parking Areas
- Old houses
- Public service offices

### ***Additional Accessories***

You can ask for additional accessories for extension at your installation or shifting of your system to another place.

### ***Installation Training Services***

Training of installation is offered for technical persons on time to time basis. Schedule of the training session announce on web site.

### ***Operation and maintenance services***

Operation and maintenance services offered for the valued customers for efficient operation of the system. Customers may ask for the O&M service contract with the company.

### ***Monitoring services***

In order to monitor solar power systems, data can be transmitted to remote locations. For communication between the solar inverter and monitoring devices, SITECNO provides two basic choices: Wireless or Blue-tooth and wired variants.



# Polycrystalline SolarModule 250W

SITECNO Solar Photovoltaic Panels stand for quality, durability and most importantly, high performance. Our experience, capacity of research, continuing development and improvement have turned us into a company recognized in the sector by the high value offered to our clients.

Due to their engineered hollow section frame and its 4mm special textured glass with AR coating, SITECNO modules meet the maximum demands with regard to stability and corrosion resistance.

Thanks to their high performance SITECNO modules are prepared for changes in legislation. These panels will produce 5% more than any other of the same features.

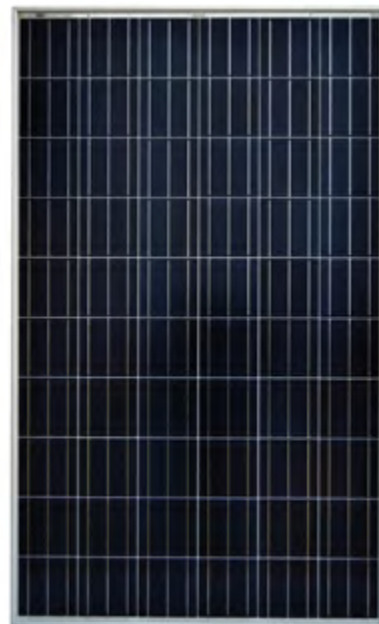
The performance warranty is for 25 years, after 12 years, modules still produce a minimum 90% of their nominal performance. After 25 years module still produce a minimum 80% of their nominal performance.

## Electrical Characteristics:

|                                |            |
|--------------------------------|------------|
| MODEL                          | SI-P60-250 |
| Nominal Power (Pmax)           | 250W       |
| Open Circuit Voltage (VOC)     | 37,5V      |
| Short Circuit Current (ISC)    | 8,76A      |
| Voltage at Nominal Power (Vmp) | 30,3V      |
| Current at Nominal Power (Imp) | 8,24A      |
| Module Efficiency (%)          | 15,20      |

## Mechanical Characteristics:

|                  |                             |
|------------------|-----------------------------|
| Cell type        | Polycrystalline 156x156mm   |
| Number of cells  | 60 (6x10)                   |
| Module dimension | 1660 x 990 x 50mm           |
| Weight           | 20kg                        |
| Front cover      | TSG low-iron tempered glass |
| Frame            | Aluminium alloy             |
| Junction box     | IP65, 3 diodes              |
| Cable length     | 1200mm (+) , 800mm(-)       |
| Connector        | PV-JM601                    |



## Temperature Coefficients:

|   |                  |
|---|------------------|
| Nominal Operating Cell Temperature (NOCT) | 25°C ±2°C        |
| Temperature Coefficients of Pmax          | -0.43% / °K      |
| Temperature Coefficients of Voc           | -0.31% / °K      |
| Temperature Coefficients of Isc           | 0.04% / °K       |
| Operating Temperature                     | -40 °C to +85 °C |
| Maximum System Voltage                    | 1000V DC         |
| Reverse current load                      | 15A              |

# SUNNY BOY 1600TL ST

## OVERVIEW

Combining a wide input voltage and input current range, the transformerless Sunny Boy can be connected to nearly all standard crystalline PV modules. As a proven entry-level model, its efficiency is first-class. Its low weight and robust enclosure make installation easy, both indoors and outdoors. With its three power classes, it is the ideal inverter for smaller PV systems.

### Efficient

Efficiency of up to 96 %

Transformerless

Complete monitoring solution thanks to integrated Speedwire/  
Webconnect interface\*

Safe

Integrated ESS DC load-break switch (optional)

Reliable

Proven technology

Maintenance free, thanks to convection cooling

Simple

SUNCLIX DC plug-in system

Easy commissioning of the integrated Speedwire/Webconnect interface\*



## TECHNICAL DESCRIPTION

### Input (DC)

|  |                         |
|--|-------------------------|
| Max. DC power (@ $\cos \varphi = 1$ )                    | 1700 W                  |
| Max. input voltage                                       | 600 V                   |
| MPP voltage range / rated input voltage                  | 155 V ... 480 V / 400 V |
| Min. input voltage / initial input voltage               | 125 V / 150 V           |
| Max. input current input A / input B                     | 12 A / 12 A             |
| Max. DC short-circuit current                            | 18 A                    |
| Number of independent MPP inputs / strings per MPP input | 1 / 2                   |

### Output (AC)

|  |                                      |
|--|--------------------------------------|
| Rated power (@ 230 V, 50 Hz)               | 1600 W                               |
| Max. apparent AC power                     | 1600 VA                              |
| Nominal AC voltage / range                 | 220 V, 230 V, 180-260 V              |
| AC power frequency / range                 | 50 Hz, 60 Hz / -5 Hz ... +5 Hz       |
| Rated power frequency / rated grid voltage | 50 Hz / 230 V                        |
| Max. output current                        | 8.9 A                                |
| Power factor at rated power                | 1                                    |
| Displacement power factor, adjustable      | 0.8 overexcited ... 0.8 underexcited |

Efficiency  
Max. efficiency / European weighted efficiency 96 % / 95 %

**Protective devices**

DC disconnect device ○  
Ground fault monitoring / grid monitoring ● / ●  
DC reverse polarity protection /  
AC short-circuit current capability / galvanically isolated ● / ● / —  
All-pole-sensitive residual-current monitoring unit ●  
Protection class (according to IEC 62103) / overvoltage category (according to IEC 60664-1) I/III

**General data**

Dimensions (W / H / D) 440 / 339 / 214 mm (17.3 / 13.3 / 8.4 inches)  
Weight 16 kg (35.3 lb)  
Operating temperature range -25°C ... +60°C (-13°F ... +140°F)  
Noise emission (typical) 33 dB(A)  
Self-consumption (night) 0.1 W  
Topology Transformerless  
Cooling concept Convection  
Degree of protection (according to IEC 60529) IP65  
Climatic category (according to IEC 60721-3-4) 4K4H  
Maximum permissible value for relative humidity (non-condensing) 100%

**Features**

DC connection / AC connection SUNCLIX / Spring clamp terminal  
Display Graphic

Interface: RS485, Bluetooth, Speedwire/Webconnect ○ / ○ / ●

Warranty: 5 / 10 / 15 / 20 / 25 years ● / ○ / ○ / ○ / ○ /

Certificates and approvals (additional on request) AS 4777, C10/11, CE, CEI 0-21, EN 504382, G83/1-1, IEC 62109-1/-2, NRS 097-2-1, PPC, PPDS, RD1699, RD 661/2007, UTE C15-712-1, VDE-AR-N 4105, VDE0126-1-1

- Standard features ○ Optional features — Not available, Data at nominal conditions



**Design**

Technical feature

Weight

Loads

Test certificate

**Cable:**

- Model:
- Rated Voltage:
- Rating Current:
- Cable Size:
- Proof Voltage:
- Protection Class:
- Temperature Range:
- Flame class:

**Modular type**

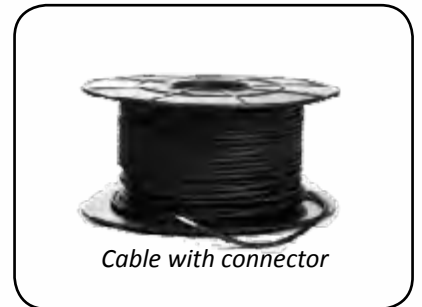
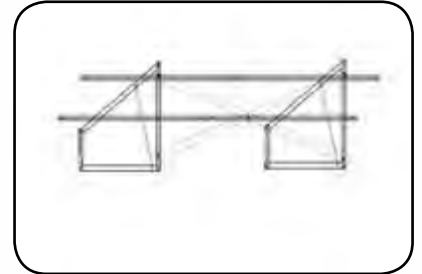
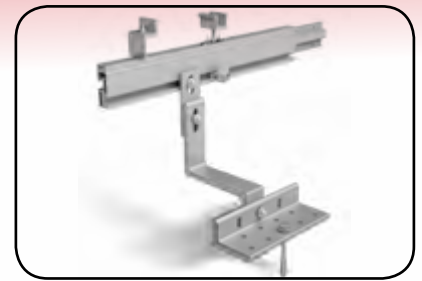
Aluminium  
25 years warranty  
Tamper proof nut bolt  
100% recycleable material  
A2 Stainless steel bolts  
2,49kg/m  
wind, snow  
CE Certifies

SI-MC4-F  
TUV 1500V DC / UL 600V DC  
20-30A  
2.5-4.0-6.0, 10-12-14AWG  
TUV 1500V AC, 1 min  
Class II  
-40 to 85°C  
UL94-V0

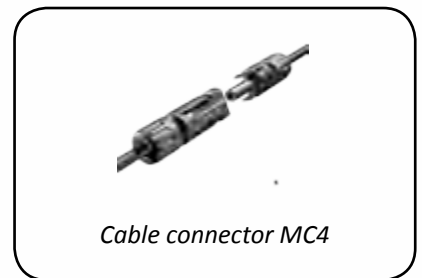
**Connector:**

Flexible conductor,  
Maximum service temperature:  
Estimated lifetime  
UV Resistant UV Resistant  
Grease & mineral oils resistance:  
Grease & mineral oils resistance:

class 5  
120°C  
30 years.  
excellent  
excellent



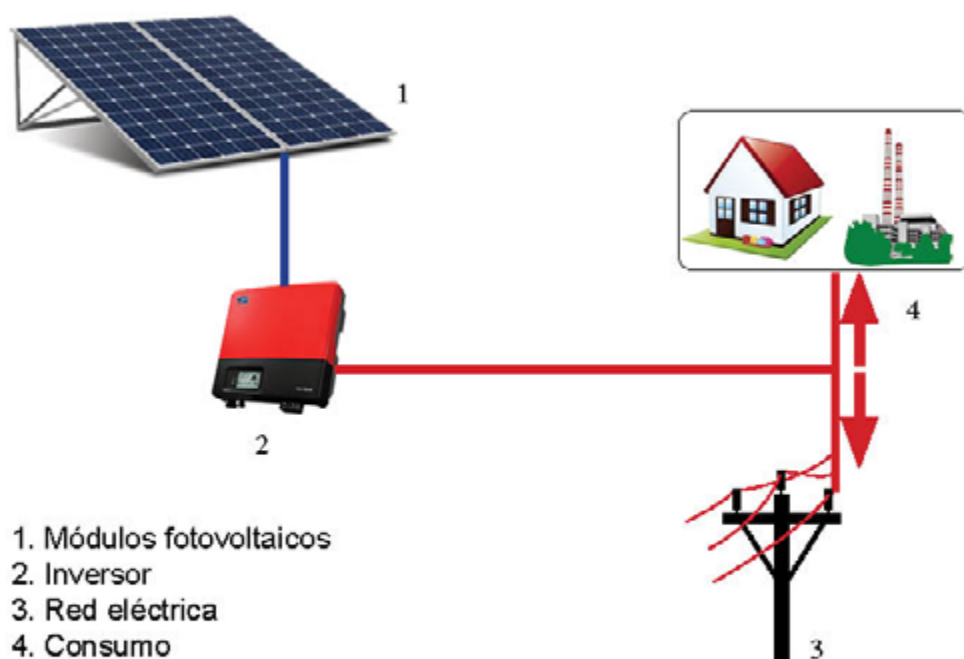
Cable with connector



Cable connector MC4

## INSTALLATION APPLICATION

- Instant self-consumption system with feed in grid (on grid)
- Instant self-consumption system without feed in to the grid (on grid)
- Solar system hybrid with diesel generator (on grid)





**SiTecno**  
ENERGY - EFFICIENCY - INNOVATION



*Distributor authorize:*

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