# SOLAR KIT MODEL: SISMA-T17000


***17000 Solar PV Hybrid Kit***
***2448 kWh per month production***
***81600 Wh per day production***

| *Quantity* | *Description* |
|---|---|
| *68* | *Solar panels 250W Polycrystalline* |
| *1* | *Solar Inverter Tripower 17000TL* |
| *1* | *Support structure for solar panels* |
| *3* | *15m DC cables 1x5.6mm R1000 2 core PV panel to charge controller with thimble at ends* |
| *3* | *5m AC cable 1x5,6mm R1000 2 core inverter to main breaker with thimble at ends* |
| *1* | *1 installation tool kit* |

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

***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 Solar Module 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 | Polycrystalline156x156mm |
| 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, 3diodes |
| 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 |

# TRIPOWER 17000TL

Economical
• Maximum efficiency of 98.2 %
• SMA OptiTrac Global Peak
MPP tracking for best MPP tracking efficiency
• Bluetooth® communication

Reliable
• Triple protection with Optiprotect:
Electronic string fuse
Self-learning string failure detection
DC surge arrester (Type II) can be integrated

Flexible
• DC input voltage up to 1,000 V
• Integrated grid management functions
• Custom plant design with Optiflex

Simple
• Three-phase feed-in
• Cable connection without tools
• SUNCLIX DC plug-in system
• Easily accessible connection area

The three-phase inverter for easy plant design Full of pioneering technology: highly flexible plant design with the three-phase Sunny Tripower inverter. Thanks to Optiflex technology, two MPP inputs and a broad input voltage range, it is suited to almost any module configuration. It meets any requirement such as reactive power supply, grid support thus reliably participating in grid management. The safety concept Optiprotect with its self-learning string-failure detection, electronic string fuse and integrable DC surge arrester type II, ensures maximum availability.

| Input (DC) | |
|---|---|
| Max. DC power (@ cos φ = 3) | 17410 W |
| Max. input voltage | 1000 V |
| MPP voltage range / rated input voltage | 400 V ... 800 V / 600 V |
| Min. input voltage / initial input voltage | 150 V / 188 V |
| Max. input current input A / input B | 33 A / 11 A |
| Max. input current per string input A / input B | 33 A / 12.5 A |
| Number of independent MPP inputs / strings per MPP input | 2 / A:5; B:1 |

| Output (AC) | |
|---|---|
| Rated power (@ 230 V, 50 Hz) | 17000 W |
| Max. apparent AC power | 17000 VA |
| Nominal AC voltage / range | 3 / N / PE, 230 V / 380 V / 400 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 | 24.6 A |
| Power factor at rated power | 1 |
| Displacement power factor, adjustable | 0.8 overexcited … 0.8 underexcited |

| | |
|---|---|
| Efficiency | |
| Max. efficiency / European weighted efficiency | 98.2 % / 97.8 % |
| | |
| 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***

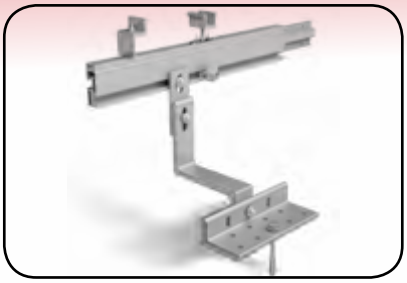
| | |
|---|---|
| Dimensions (W / H / D) | 665 / 690 / 265 mm (26.2 / 27.2 / 10.4 inches) |
| Weight | 64 kg (141.1 lb) |
| Operating temperature range | –25°C … +60°C (–13°F … +140°F) |
| Noise emission (typical) | 51 dB(A) |
| Self-consumption (night) | 1 W |
| Topology | Transformerless |
| Cooling 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% |

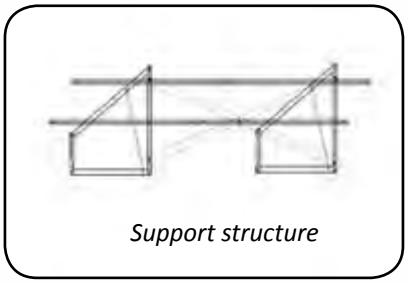
***Features***

| | |
|---|---|
| DC connection / AC connection | SUNCLIX / Spring clamp terminal |
| Display | Graphic |
| Interface: RS485, Bluetooth, Speedwire/Webconnect | ○/ ●/ ○ |
| Multi-function relay / Power Control Module | ○/ ○ |
| Warranty: 5 / 10 / 15 / 20 / 25 years | ● / ○ / ○ / ○/ |
| Certificates and approvals (additional on request) | AS 4777, BDEW 2008, C10/11:2012, CE, CEI 0-16, CEI 0-21, EN 504381, G59/3, IEC 61727 (MEA/PEA), IEC 62109-1/2, NEN EN 50438, PPC, PPDS, RD 1699, RD 661/2007, SI4777, UTE C15-712-1, VDE 0126-1-1, VDE-AR-N 4105 |

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

| | |
|---|---|
| ***Design*** | ***Modular type*** |
| Technical feature | Aluminium<br>25 years warranty<br>Tamper proof nut bolt<br>100% recyclable material<br>A2 Stainless steel bolts |
| Weight | 2,49kg/m |
| Loads | wind, snow |
| Test certificate | CE Certifies |

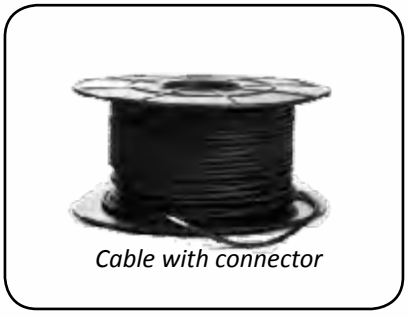




*Support structure*

***Cable:***

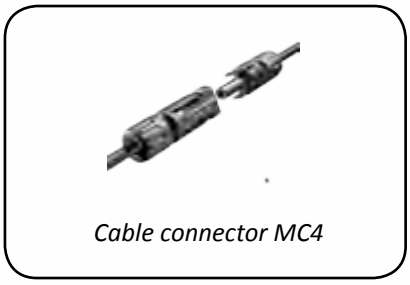
| | |
|---|---|
| · Model: | SI-MC4-F |
| · Rated Voltage: | TUV 1500V DC / UL 600V DC |
| · Rating Current: | 20-30A |
| · Cable Size: | 2.5-4.0-6.0, 10-12-14AWG |
| · Proof Voltage: | TUV 1500V AC, 1 min |
| · Protection Class: | Class II |
| ·· Temperature Range: | -40 to 85°c |
| · Flame class: | UL94-V0 |



*Cable with connector*

***Connector:***

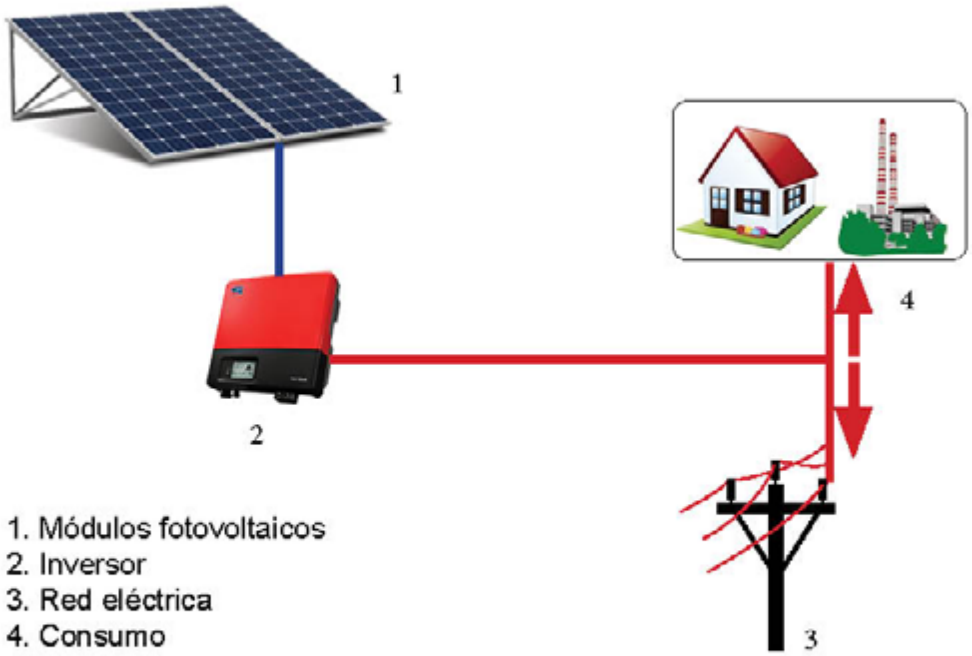
| | |
|---|---|
| Flexible conductor, | class 5 |
| Maximum service temperature: | 120°C |
| Estimated lifetime | 30 years. |
| UV Resistant UV Resistant | |
| Grease & mineral oils resistance: | excellent |
| Grease & mineral oils resistance: | excellent |



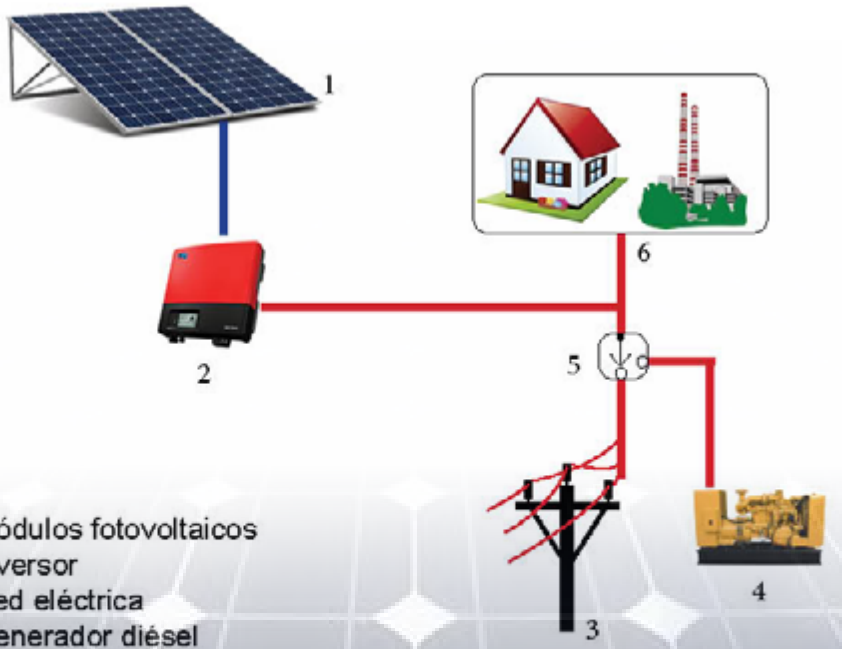
*Cable connector MC4*

## INSTALLATION APPLICATION

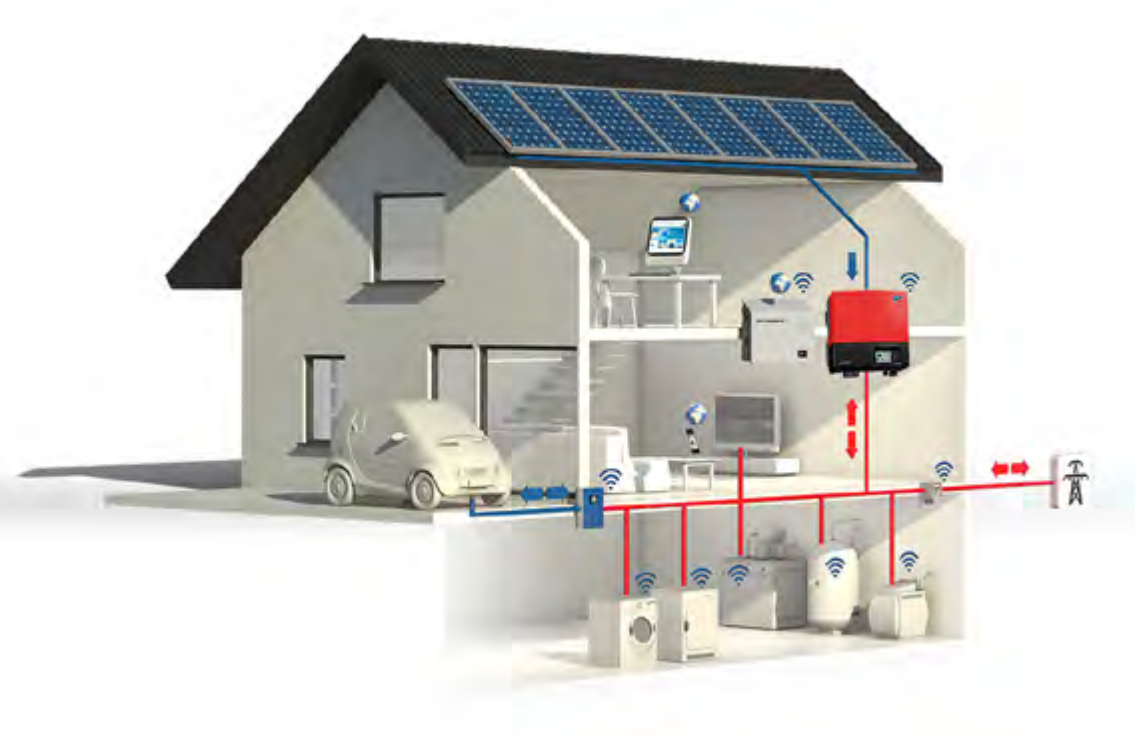
- Instant self-consumption system with feed in grid (on grid)
- Instant self-consumption system without feed in to the grid (on grid)
- Solar system hybrid with diesel generator (on grid)




1. Módulos fotovoltaicos
2. Inversor
3. Red eléctrica
4. Consumo




1. Módulos fotovoltaicos
2. Inversor
3. Red eléctrica
4. Generador diésel
5. Conmutador
6. Consumo



*Distributor authorize:*

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