

SOLAR KIT MODEL: SISMA-T20000



20000 Solar PV Hybrid Kit

2880 kWh per month production

96000 Wh per day production

<i>Quantity</i>	<i>Description</i>
80	Solar panels 250W Polycrystalline
1	Solar Inverter Tripower 20000TL
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
- 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 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	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

TRIPower 2000TL

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 (@ $\cos \varphi = 3$)	20440 W
Max. input voltage	1000 V
MPP voltage range / rated input voltage	320 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)	20000 W
Max. apparent AC power	20000 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	29 A
Power factor at rated power	1
Displacement power factor, adjustable	0.8 overexcited ... 0.8 underexcited

Efficiency
Max. efficiency / European weighted efficiency 98.4 % / 98 %

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 62109-0) / overvoltage
category (according to IEC 62109-1) I/III

General data

Dimensions (W / H / D) 661 / 682 / 264 mm (26 / 26.9 / 10.4 inches)
Weight 61 kg (134.48 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 -
Interface: RS485, Bluetooth, Speedwire/Webconnect ○ / ●
Multi-function relay / Power Control Module ○ / ○
Warranty: 5 / 10 / 15 / 20 / 25 years ● / ○ / ○ / ○ / ○ /
Certificates and approvals (additional on request) ANRE 30, AS 4777, BDEW 2008, C10/11:2012, CE,
CEI 0-16, CEI 0-21, EN 50438*, G59/3, IEC 60068-2-x,
IEC 61727, IEC 62109-1/2, IEC 62116, MEA 2013,
NBR 16149, NEN EN 50438, NRS 097-2-1, PEA 2013,
PPC, RD 1699/413, RD 661/2007, Res. n°7:2013, SI4777,
UTE C15-712-1, VDE 0126-1-1, VDE-AR-N 4105,
VFR 2014

- 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:

Connector:

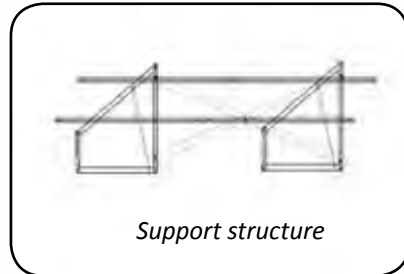
Flexible conductor,
Maximum service temperature:
Estimated lifetime
UV Resistant UV Resistant
Grease & mineral oils resistance:
Grease & mineral oils resistance:

Modular type

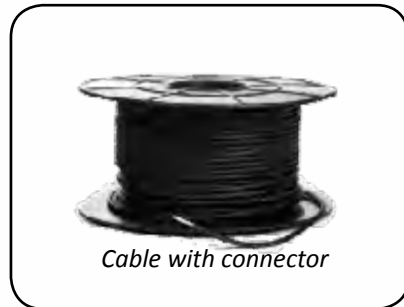
Aluminium
25 years warranty
Tamper proof nut bolt
100% recyclable material
A2 Stainless steel bolts
2,49kg/m
wind, snow
CE Certifies

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

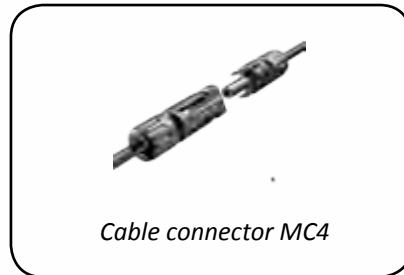
class 5
120°C
30 years.
excellent
excellent



Support structure



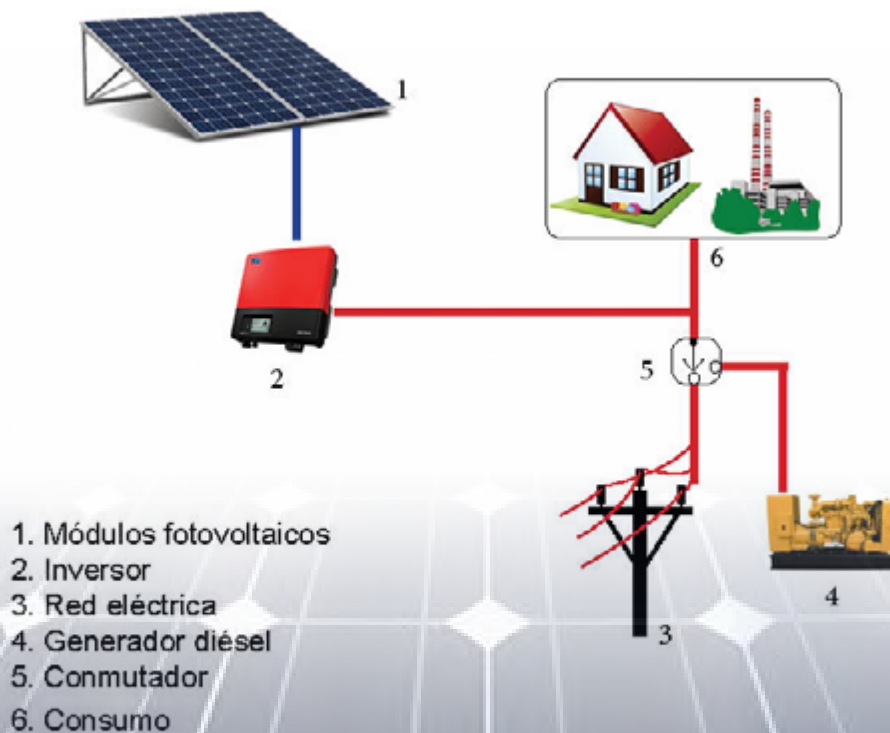
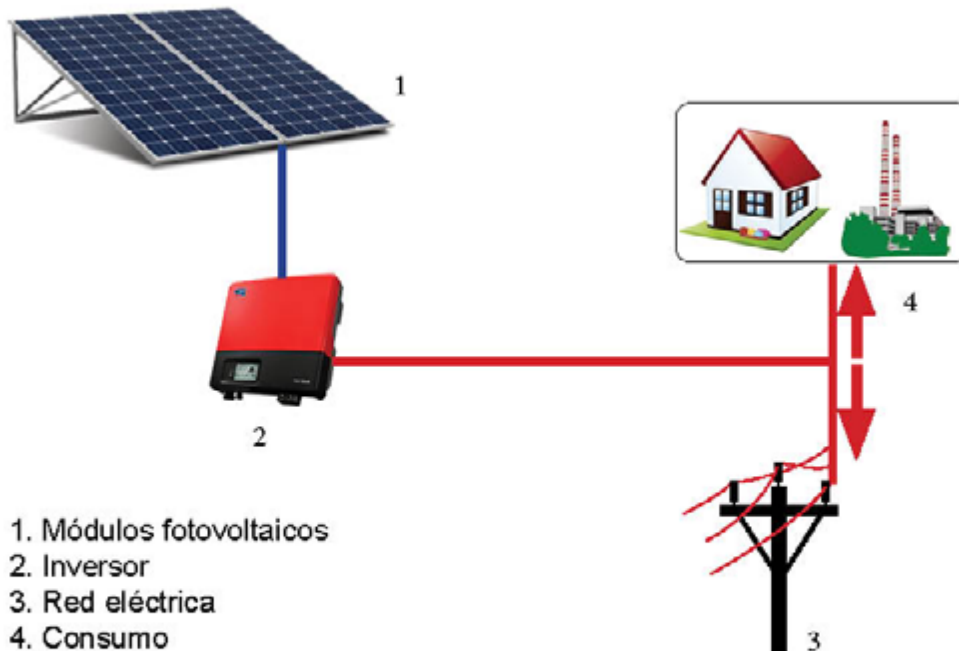
Cable with connector



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



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