SOLAR KIT MODEL: SISMA-3000

6000 Solar PV Hybrid Kit
864 kWh per month production
28800 Wh per day production

Quantity	*Description*
24	*Solar panels 250W Polycrystalline*
2	*Solar Inverter 3000TL*
1	*Support structure for solar panels*
2	*15m DC cables 1x5.6mm R1000 2 core PV panel to charge controller with thimble at ends*
2	*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

SUNNY BOY 3000TL

MORE EFFICIENT
THANKS TO ITS 750 V DC INPUT VOLTAGE
Electrifying detail: Thanks to the higher, 750 volt maximum DC input voltage, often times one less module string is needed because more modules can be switched on in a series.

- Highly flexible design reduces cabling requirements
- Maximum efficiency of 97 percent ensures top solar yield

MORE FLEXIBLE
THANKS TO MULTI-STRING TECHNOLOGY
Greater flexibility in planning, implementing and solar harvest: The advantages of multi-string technology in the new transformerless Sunny Boy are also available in the 3 kW model.

- Optimal yield in partial shading and efficient operation of east/west arrays
- Two MPP trackers with expandable OptiTrac®* Global Peak operational control
- Optional: Single Tracker for complex or simple roof structures or as an add-on to existing PV plants

EASIER
THANKS TO INNOVATIVE MOUNTING CONCEPT
The wall mount has also been redesigned, and now allows you to attach the inverter easily by inserting it from above.

- Fast and professional attachment, even on walls that are not completely straight
- Popular anti-theft protection option available

UNIVERSALLY APPLICABLE
THANKS TO INTEGRATED GRID MANAGEMENT
Intelligent controls offer advantages in every situation: Thanks to its integrated grid management functions, the new Sunny Boy with Reactive Power Control offers universal deployment options and contributes to grid support.

- Fewer disconnections from the grid thanks to voltage reduction via reactive power
- Increased plant profitability

Input (DC)	
Max. DC power (@ cos φ = 1)	3200 W
Max. input voltage	750 V
MPP voltage range / rated input voltage	175 V ... 500 V / 400 V
Min. input voltage / initial input voltage	125 V / 150 V
Max. input current input A / input B	15 A / 15 A
Max. input current per string input A / input B	15 A / 15 A
Number of independent MPP inputs / strings per MPP input	2 / A:2; B:2

Output (AC)	
Rated power (@ 230 V, 50 Hz)	3000 W
Max. apparent AC power	3000 VA
Nominal AC voltage / range	220 V, 230 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	16 A
Power factor at rated power	1
Displacement power factor, adjustable	0.8 overexcited … 0.8 underexcited

Efficiency	
Max. efficiency / European weighted efficiency	97 % / 96 %
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

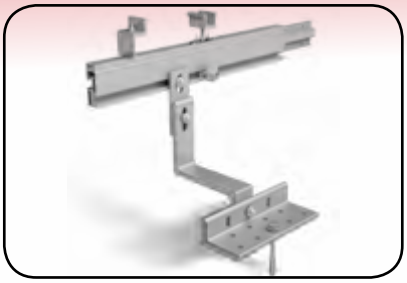
Dimensions (W / H / D)	490 / 519 / 185 mm (19.3 / 20.4 / 7.3 inches)
Weight	26 kg (57.3 lb)
Operating temperature range	–25°C … +60°C (–13°F … +140°F)
Noise emission (typical)	25 dB(A)
Self-consumption (night)	1 W
Topology	Transformerless
Cooling concept	Convection
Degree of protection (according to IEC 60529)	IP65
Climatic category (according to IEC 60721-3-4)	4K4H
Maximum permissible value for relative humidity (non-condensing)	100%

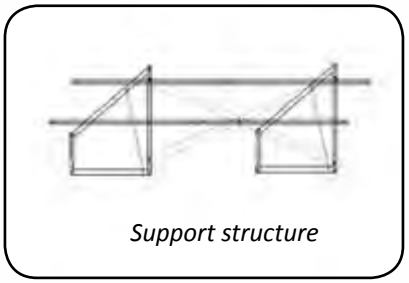
Features

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, C10/11, CE, CEI 0-21, EN 50438[1], G59/2, G83/1-1, IEC 61727, MEA4, NRS 097-2-1, PEA4, PPC, PPDS, RD1699, RD 661, UTE C15-712, VDE-AR-N 4105, VDE0126-1-1

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

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





Support structure

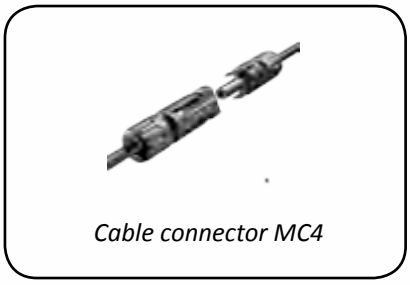
Cable:

· 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:

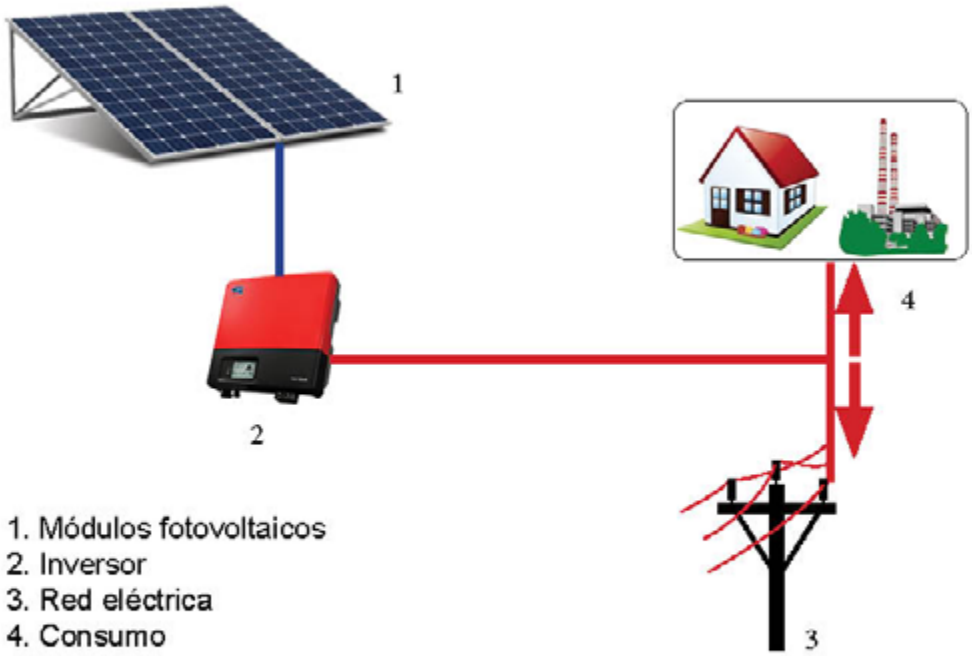
Flexible conductor,	class 5
Maximum service temperature:	120°C
Estimated lifetime	30 years.
UV Resistant UV Resistant	
Grease & mineral oils resistance:	excellent
Grease & mineral oils resistance:	excellent



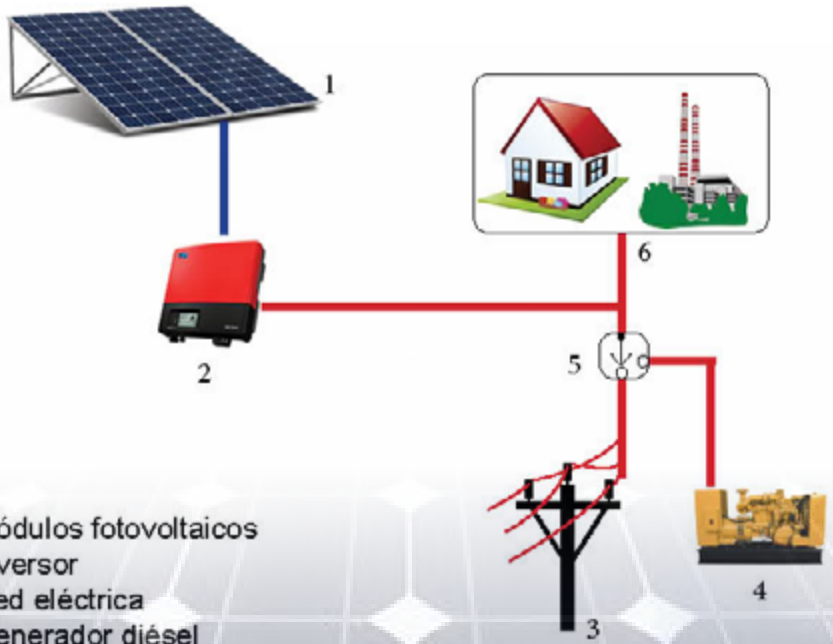
Cable connector MC4

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

SITECNO S.A.
C/ Can balmes 1, Zona industrial,
Santa. Mª. de Palautordera,
08460 Barcelona, Spain.
Tel: +34 938482544
Fax: +34 938480439
info@sitecnosolar.eu
www@sitecnosolar.eu

SiTecno
ENERGÍA, EFICIENCIA, INNOVACIÓN

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