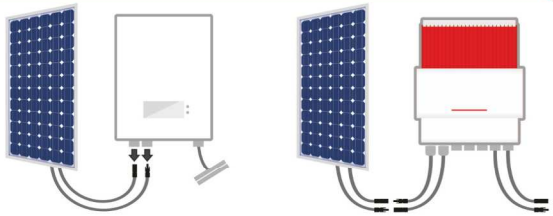
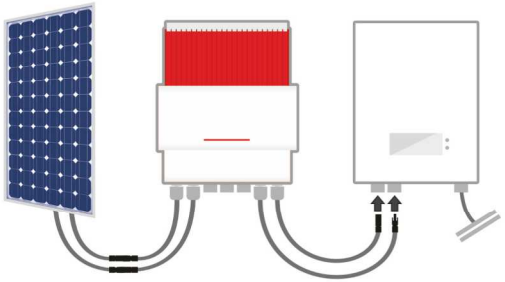
Install Solar Eclipse in 4 simple steps

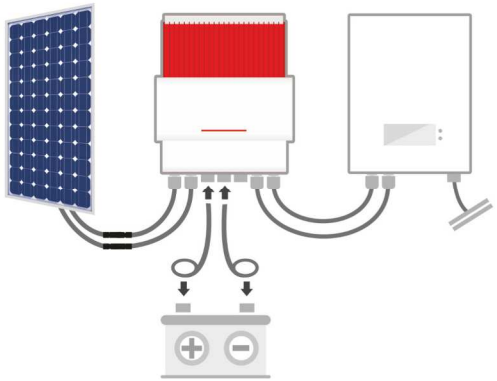
1 Disconnect modules from the inverter and connect them to Solar Eclipse



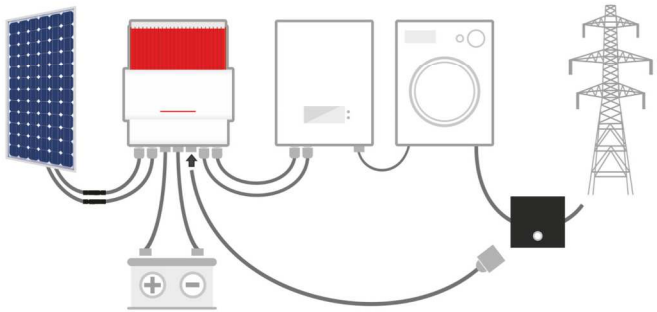
2 Connect Solar Eclipse to the inverter



3 Connect batteries to Solar Eclipse



4 Install the grid power sensor at the framework and connect it to Solar Eclipse



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SOLAR ECLIPSE
saveyourenergy

Sun energy overnight

What is Solar Eclipse?

Solar Eclipse is the unique ingenious system which allows You to take advantage of the whole energy produced by your photovoltaic field, with no need to modify the plant nor purchase a new inverter.
Solar Eclipse is an electronic intelligent system that stores the exceeding electric energy produced by the traditional photovoltaic plant, charging common batteries (lead acid, gel, AGM, …) for using it when needed (overnight or during low solar radiation moments).
Solar Eclipse doesn't need any modification of the plant, but is simply connected to photovoltaic modules one side and to the grid inverter the other side.
Moreover, four 12 V at least 100 Ah common batteries must be connected.

Solar Eclipse operates completely in direct current and does not need any connection with the distribution grid

Who can purchase it?

Solar Eclipse is suitable for anyone owns a grid connected photovoltaic plant with power between 1 and 6 kW per phase.
Solar Eclipse fits with any kind of grid connected inverter, any brand*, with inlet voltage between 200 V and 600 V and can operates either with single phase and three phases inverters because it completely works in DC.

* *it's important to communicate the inverter's details before the order to verify the very compatibility*

Which batteries?

Solar Eclipse recharges any type of battery pack with 48 V voltage and capacity between 100 Ah and 450 Ah.
The charging cycle is programmable according to the battery type (lead acid liquid, gel, AGM, etc).
For a modest energy consumption during the night, four 100 Ah batteries are enough.

How does it works?

When the photovoltaic modules' power exceeds the one requested by the user, Solar Eclipse starts storing in the battery pack the energy excess that otherwise would be given in the grid, behaving as a DC battery charger.
When the power requested by the user exceeds the one produced by the photovoltaic plant instead (overnight or during cloudy time), Solar Eclipse takes energy from the batteries for giving it to the inverter, so the user doesn't need any take from the grid.
So, Solar Eclipse operates as a battery charger when the solar power is in excess, and as a radiated photovoltaic added string when the solar power is not sufficient or present at all.

- **Does never charge batteries with energy from the grid**
- **The first energy produced by the photovoltaic plant gets used to power the user**
- **Exceeding energy gets used to charge the batteries**
- **The energy still exceeding gets given in the grid**
- **Uses the stored energy when the sun is not sufficient or overnight**

Daytime

The exceeding energy produced by your photovoltaic plant is stored in "Solar Eclipse"

Nighttime

Overnight and during the cloudy days Solar Eclipse gives You back the energy You need, with no access to the grid

Solar Eclipse 1.5		
Input photovoltaic modules section		
Input Voltage	200~ 600V	d.c.
Output Inverter Grid section		
Output Voltage	150 ~ 600 V	d.c.
Power rated output	1500 W	d.c.
Section battery pack		
Rated Voltage	48 V	
Battery capacity	100~450 Ah	
Charging cycle voltage	35 ~ 60 V	programmable
Charging current	0 ~ C_{10}	*C_5 with 150 Ah batteries
Protection fuses	30 A	
General		
Logic	Grid power sensor	User power sensor (optional)
Communication ports	Serial RS485	Ethernet Rj45
Weight	6 Kg	Aluminium structure
Size	339 x 256 x 141mm	H x L x P
Standard	CEI 0-21 - EN	EMC safety
Certifications	CE	EMC safety
Degrees of protection	IP 20	

Everything works automatically and anytime You can check your free energy stock, directly stored from the sun

save your energy

The unique system in the market that allows You to store energy without modifying or losing characteristics of your grid connected plant

SOLAR ECLIPSE
saveyourenergy

- Cut down the electricity bill even for night consumption
- Store the exceeding energy produced by your photovoltaic plant
- Increase the available power for your home
- Connect it in four steps to your photovoltaic plant!

Note: this document has an educational purpose and means neither a contractual offer nor a project