



**OffgridSun**  
*Be part of the solution*



**SOLAR SOLUTIONS**  
COMPLETE STAND-ALONE  
SOLAR KITS



**COMPONENTS**  
FOR STAND-ALONE  
SOLAR PLANTS

# 2025

CATALOGUE



We are an **ITALIAN COMPANY** specialized in developing, design, manufacturing and sale of leading-edge photovoltaic technologies, so that anyone in the world, even in the areas without access to the electricity grid, can benefit from reliable, clean and affordable energy.

OffgridSun was officially founded in **2016** but our story first began in 2008, within **FuturaSun**, a photovoltaic module manufacturing company. OffgridSun and FuturaSun have since become partners for the electrification of rural areas throughout the world.



In 2024, OffgridSun East Africa was established with a new office in Dar Es Salaam, Tanzania, to follow the East African market even more closely.

## A **TEAM** with a passion for the sun:

**+ 20 years** of professional experience in off-grid systems design and installation

**+ 15 years** of entrepreneurial experience in industrial production of PV components

**+ 30 years** of direct experience in international development cooperation.

## YOUR PARTNER OF EXCELLENCE

OffgridSun not only offers high quality products but also provides tailor-made solutions for each customer:

- Free sizing tips for your photovoltaic system
- Pre-sales and after-sales support
- On-site assistance and installation supervision with our highly-skilled off-grid technicians
- International tender preparation
- Free consultancy for repowering of existing off-grid systems
- NGO technical assistance for systems in low-income countries
- On-site training for local electricians and installers to build knowledge on solar photovoltaic technologies in developing countries
- Specific training on maintenance activities for the long-term operation of the systems



[www.offgridsun.com](http://www.offgridsun.com)

VISIT OUR WEBSITE  
AND DISCOVER MORE

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## SOLAR SOLUTIONS COMPLETE **STAND-ALONE** SOLAR KITS

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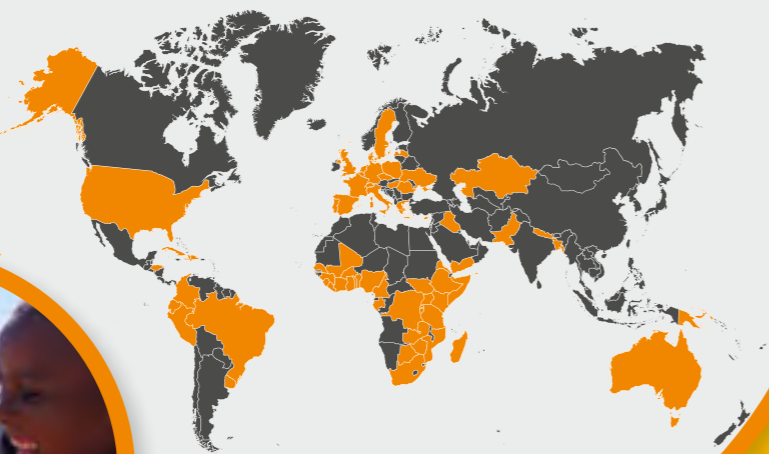
## Mission

Ensure access to reliable, sustainable, modern and affordable energy for everyone.

Goal 7  
United Nations 2030  
Agenda for Sustainable  
Development



More than **350 partners**  
in over **60 countries**



## GLOBAL SOLAR IRRADIATION

LATIN AMERICA  
AND CARIBBEAN



AFRICA  
AND EUROPE

Media irraggiamento giornaliero

- GR1 ≈ 6 kWh/m<sup>2</sup>
- GR2 ≈ 5 kWh/m<sup>2</sup>
- GR3 ≈ 4 kWh/m<sup>2</sup>
- GR4 ≈ 3 kWh/m<sup>2</sup>
- GR5 ≈ 2 kWh/m<sup>2</sup>
- GR6 ≈ 1 kWh/m<sup>2</sup>

# SOLAR SOLUTIONS

## COMPLETE STAND-ALONE KITS

We research and develop highly innovative solar energy applications. This is why our catalogue includes tried-and-tested products for mass electrification, as well as solutions, tailored to the specific requirements of our customers and users.

- SOLAR HOME KITS
- SOLAR BALCONY KITS
- PORTABLE SOLAR KITS
- SOLAR PUMPING SYSTEMS
- SOLAR LED STREET LIGHTS
- MINI-GRIDS



# SOLAR HOME KIT



**Pre-sized systems**, suitable for the electrification of places far from the power grid: small houses, mountain huts, small shops.

**SOLAR HOME 100** is a low-voltage, inverter-free kit suitable for lighting and cell phone charging.

**SOLAR HOME 380, 800, and 800 PLUS** make it possible to produce **electricity at 230 V** and therefore use the common appliances in a home: from **radios** to **TV** and even a refrigerator. Already suitable for other energy sources in addition to solar: gen sets or future connection to the utility grid, which can be managed and used at the same time as free energy from the sun.

## SOLAR HOME KIT 100 W – 12 V

Piccolo kit fotovoltaico per carichi in corrente continua, ideale per l'illuminazione di costruzioni isolate



Description	Code
<ul style="list-style-type: none"> <li>1 Polycrystalline PV module, FU100M Nova - 100 W</li> <li>1 Charge regulator VS1024AU with display and USB ports</li> <li>1 Solar AGM battery 100 Ah – 12V</li> <li>3 LED bulbs 8 W – 12/24 V (800 lumen)</li> </ul>	<b>SHOME100</b>
<ul style="list-style-type: none"> <li>1 Polycrystalline PV module FU100M Nova - 100 W</li> <li>1 Charge regulator VS1024AU with a display and USB ports</li> <li>1 Inverter input 12 V, output 1000 W - 230 V</li> <li>1 Solar AGM battery 100 Ah – 12V</li> <li>3 LED bulbs 8 W – 12/24 V (800 lumen)</li> </ul>	<b>SHOME100AC</b>

## PRE-CONFIGURED KITS

### SOLAR HOME KIT 380 W – 230 V

Small photovoltaic kit for AC loads, ideal for having electricity in your tool shed



Description	Code
<ul style="list-style-type: none"> <li>2 Monocrystalline PV modules FU190M Nova - 190 W</li> <li>1 Inverter-charger SP1000 Initial-P, input 12 V, output 1,000 W - 230 V</li> <li>1 Solar AGM battery 140 Ah – 12 V</li> </ul>	<b>SHOME380</b>

### SOLAR HOME KIT 800 W – 230 V

Medium-sized photovoltaic kit for AC loads, ideal for small summer shelters



Description	Code
<ul style="list-style-type: none"> <li>Monocrystalline PV modules FU400M Silk® Premium - 400 W</li> <li>1 Inverter-charger SP3000 Initial-M, input 24 V, output 3,000 W - 230 V</li> <li>2 Solar AGM battery 140 Ah – 12 V</li> </ul>	<b>SHOME800</b>

### NEW SOLAR HOME KIT 800 W PLUS

For greater storage capacity than Solar Home 800, ideal for small shelters, open even in cold seasons



Description	Code
<ul style="list-style-type: none"> <li>2 Monocrystalline PV modules FU400M Silk® Premium - 400 W</li> <li>1 Inverter-charger SP3000 Initial-M, input 24 V, output 3,000 W - 230 V</li> <li>2 Solar AGM battery 250 Ah – 12 V</li> </ul>	<b>SHOME800PLUS</b>

# PRE-SIZED KITS



12 kWp single-phase PV plant for alpine hut

**SOLAR HOME** from 2150 W to 6880 W, with lead-acid or lithium-ion storage, enable photovoltaic and/or other back-up energy sources (generator sets or utility grid) to power small and medium-sized facilities with loads such as electric boilers and classic **household** appliances (oven, washing machine, dishwasher, etc.).

Contact us for custom sizing.

## NEW SOLAR HOME KIT 2150 W – 230 V

Medium-sized photovoltaic kit with lead-acid batteries, ideal for small cabins



Description	Code
<ul style="list-style-type: none"> <li>5 Monocrystalline PV modules FU430M Silk Nova - 430 W</li> <li>1 inverter-Charger SP4000 Handy Plus</li> <li>4 Solar AGM battery 200 Ah – 12 V</li> <li>1 lead acid battery equalizer with integrated display</li> </ul>	<b>SHOME2150</b>

# PRE-CONFIGURED KITS

## NEW SOLAR HOME KIT 3440 W – 230 V

Large photovoltaic kit for AC loads ideal for summer cabins



Description	Code
<ul style="list-style-type: none"> <li>8 monocrystalline PV modules FU430M Silk Nova - 430 W</li> <li>1 hybrid inverter Deye 3.6 kW - 48 V</li> <li>1 LiFePO4 lithium battery 5.12 kWh</li> </ul>	<b>SHOME3440</b>

## NEW SOLAR HOME KIT 4300 W

Large photovoltaic kit with lithium batteries for greater autonomy, ideal for cabins open all year round.



Description	Code
<ul style="list-style-type: none"> <li>10 Monocrystalline PV modules FU430M Silk Nova - 430 W</li> <li>1 Hybrid inverter Deye Single 3.6 kW - 48 V</li> <li>2 LiFePO4 lithium batteries 5.12 kWh, total capacity 10.24 kWh</li> <li>1 rack cabinet</li> </ul>	<b>SHOME4300</b>

## NEW SOLAR HOME KIT RESIDENTIAL

Photovoltaic kit for residential applications



Description	Code
<ul style="list-style-type: none"> <li>16 Monocrystalline PV modules FU430M Silk Nova - 430 W</li> <li>1 Hybrid inverter Optor Single 6 kW - 48 V</li> <li>3 LiFePO4 lithium batteries 5.12 kWh, total capacity 15.36 kWh</li> <li>1 rack cabinet with bus bar</li> </ul>	<b>SHOMERES</b>

# SOLAR BALCONY KIT

## PORTABLE SOLAR KITS



The Plug&Play kit makes your balcony produce energy:

- WiFi gateway for control via App included
- Plug&Play system up to 800 W
- Microinverter compliant with many national grid codes for grid connection
- Ideal for installations on balconies, terraces, gardens

### SOLAR BALCONY 400 W

Description	Code
<ul style="list-style-type: none"> <li>• 2 Monocrystalline PV modules FU190M Nova - 190 W</li> <li>• 1 microinverter HMS-350 W</li> <li>• 1 cable with Schuko socket</li> <li>• 1 USB Stick for Wi-Fi</li> </ul>	<b>BALCSOL</b>

### SOLAR BALCONY 800 W

Description	Code
<ul style="list-style-type: none"> <li>• 2 Monocrystalline PV modules FU430M Silk Nova</li> <li>• 1 microinverter HMS-800 W</li> <li>• 1 cable with Schuko socket</li> <li>• 1 USB Stick for Wi-Fi</li> </ul>	<b>BALCSOLMAX</b>

### 230V NEW MASTER BOX

The portable kit with 3600 W of **alternate current** power. Equipped with a 2048 Wh lithium (LiFePO4) battery, **230 V AC and 12 V DC** outputs. Accepts up to **1200 W of photovoltaic power**. Battery charges quickly from both grid and PV.



Description	Code
<ul style="list-style-type: none"> <li>• 2048 Wh, 51.2 V DC lithium battery (LiFePO4).</li> <li>• 1 integrated 3600 W/230 VAC inverter</li> <li>• 4 230 V Schuko outputs</li> <li>• 4 USB A 5V 3A outputs</li> <li>• 4 USB C 100W outputs</li> <li>• 2 DC 12V/10A outputs</li> <li>• 1 integrated LED light</li> <li>• Weight 29 kg, dimensions 456 x 290 x 391 mm</li> <li>• dolly</li> <li>• recommended pairing: 1 x 400 W FU400M Silk Premium module</li> </ul>	<b>MASTERBOX</b>

### 12V POWER BOX

The complete kit with a portable solar generator, a 30 W PV module, 12 V ports, 3 LED lights, USB ports and a kit cable for phone charging. The ideal solution for all homes, campsites and even for small businesses with no connection to the electrical grid.



Description	Code
<ul style="list-style-type: none"> <li>• 1 x 30 W polycrystalline PV module with 5 meters long cable (dimensions: 630 x 340 x 17 mm)</li> <li>• Box with charge controller and Lithium rechargeable battery 18 Ah/12 V with high thermal resistance and long service life 12 V outputs</li> <li>• 3 x 3 W LED lights with 3 m long cable</li> <li>• 1 USB port for phone charging</li> <li>• 1 Kit of phone charge adapters</li> </ul>	<b>POWERBOX30</b>

# ENERGY STATION



New larger battery  
+ 33% of energy

Now with dual USB ports



Energy Station is the ideal solution for accessing energy in areas not served by the public grid.



Each of 3 bulbs can brightly illuminate a 9 m<sup>2</sup> room



If you charge it via USB, you can do it with Energy Station



Solar torch and radio are included in the premium version

## EASY AND SAFE

### to connect

Thanks to the intuitive icons

### to check

Charge indicator LEDs to monitor the battery level

### to replace

Battery easily replaceable at the end of the life with common tools

### day after day

Designed in Italy. Robustness and durability tests passed

## PORTABLE RADIO

Description	Code
Portable radio AM/FM/SW with MP3 reader chargeable via USB	PORTABLE RADIO



# PORTABLE SOLAR KITS



ENERGY STATION meets **VERASOL** Recommended Performance Targets

ENERGY STATION has been awarded with the **SOLAR IMPULSE EFFICIENT SOLUTION** label

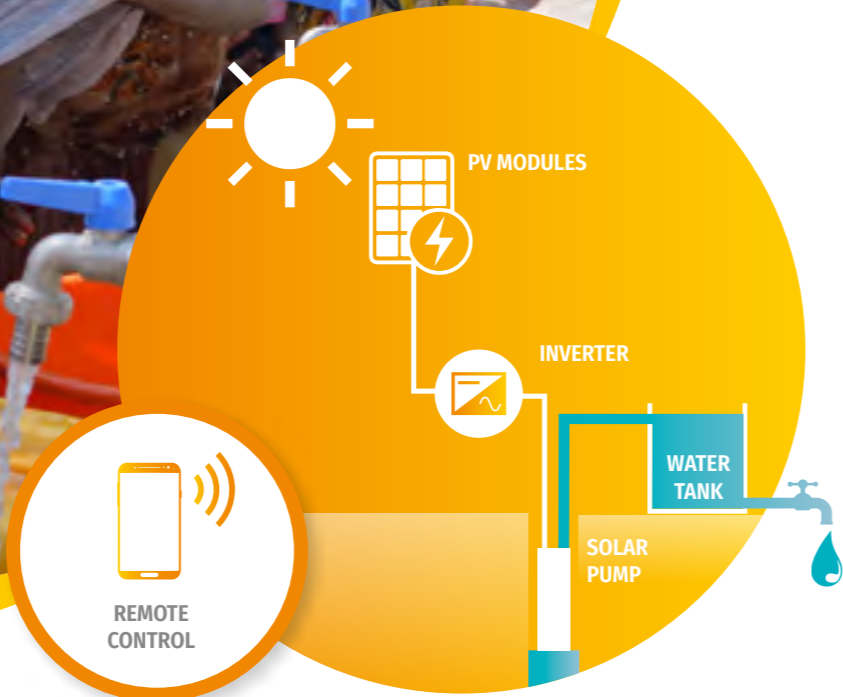
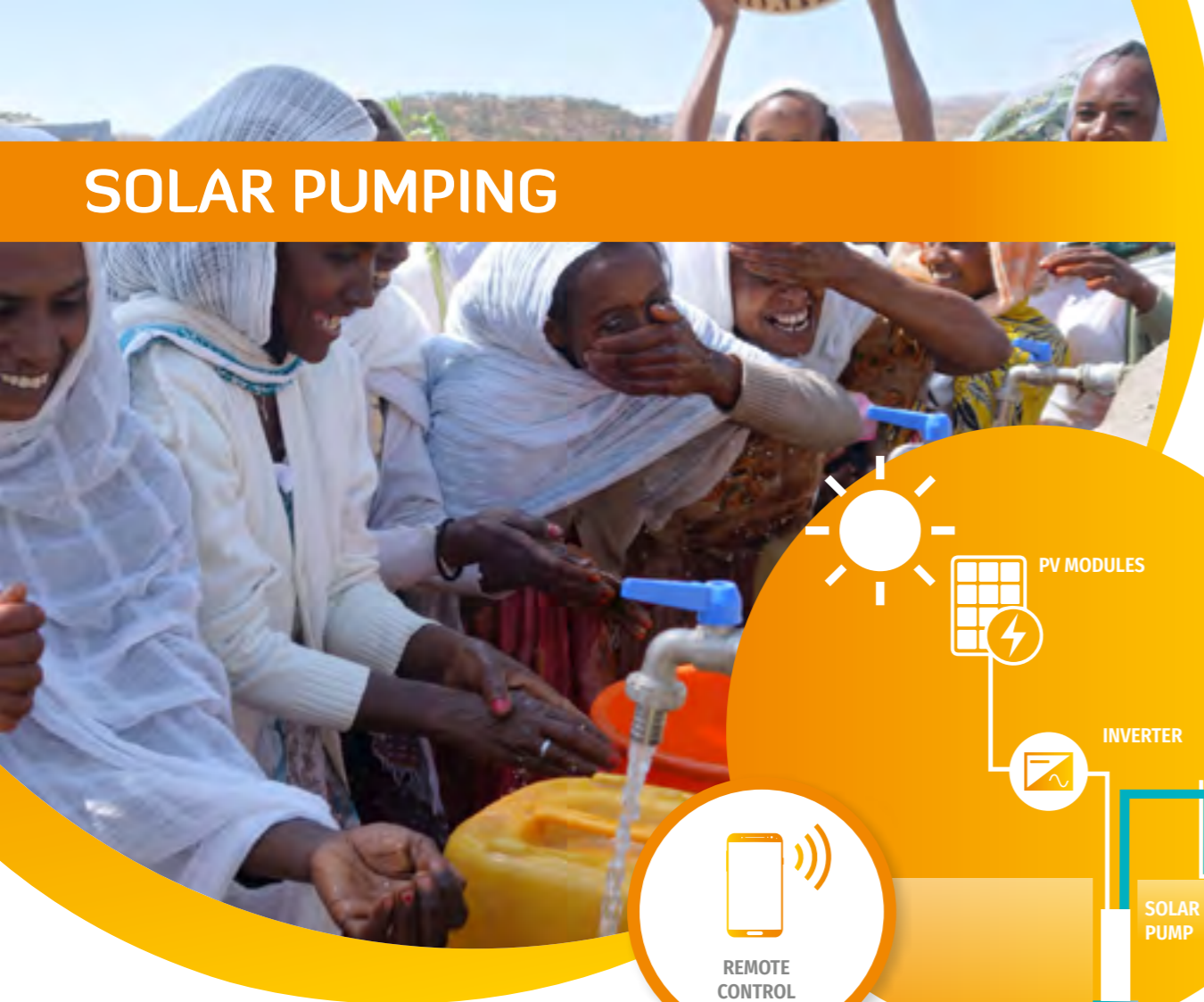


ENERGY STATION NEXT

ENERGY STATION PREMIUM

Description	Code
<p><b>ENERGY STATION NEXT - 15 W</b></p> <ul style="list-style-type: none"> <li>1 x 15 W polycrystalline PV module (dimensions: 365 x 365 x 30 mm)</li> <li>Box with charge controller and new rechargeable battery LiFePO<sub>4</sub>, 6,000mAh/6.4 V with high thermal resistance and long service life (4,000 charging cycles)</li> <li>3 LED bulbs 1.6 W (tot. light output 500 lm), with 3-6-8 m cables with switch buttons</li> <li>2 USB ports for phone charging</li> <li>1 Kit of phone charge adapters</li> <li>1 AM/FM/SW portable radio &amp; MP3 reader chargeable via USB</li> <li>3 W Speaker, 2,000 mAh/3.7 V Li-ion battery</li> </ul>	<b>ESNEXT</b>
<p><b>ENERGY STATION PREMIUM - 10 W</b></p> <ul style="list-style-type: none"> <li>1 x 10 W polycrystalline PV module (dimensions: 340 x 235 x 17 mm)</li> <li>Box with charge controller and new rechargeable battery LiFePO<sub>4</sub>, 6,000 mAh/6.4 V with high thermal resistance and long service life (4,000 charging cycles)</li> <li>2 LED bulbs 2 W, 1 LED bulb 1 W (tot. light output 500 lm), with 3-6-8 m cables with switch buttons</li> <li>2 USB ports for phone charging</li> <li>1 Kit of phone charge adapters</li> <li>1 x 0.5 W LED solar torch with 0.2 W reading light (Luminous flux: 40 lm), 0.2 W solar panel, 250 mAh/3.2 V LiFePO<sub>4</sub> battery.</li> <li>1 AM/FM/SW portable radio &amp; MP3 reader chargeable via USB</li> <li>3 W Speaker, 1,200 mAh/3.7 V Li-ion battery</li> </ul>	<b>ESPREMIUM</b>
<p><b>ENERGY STATION PLUS - 8 W</b></p> <ul style="list-style-type: none"> <li>1 x 8 W polycrystalline PV module</li> <li>Box with charge controller and new rechargeable battery LiFePO<sub>4</sub>, 6,000 mAh/6.4 V with high thermal resistance and long service life (4,000 charging cycles)</li> <li>3 Led bulbs 1 W (tot. light output 320 lm) with 3-6-8 m cables with switch buttons</li> <li>2 USB port for phone charging</li> <li>1 Kit of phone charge adapters</li> </ul>	<b>ESPLUS</b>

# SOLAR PUMPING



OffgridSun solar pumping kits are the **ideal one-stop-shop solution for providing a stable access to safe water, from boreholes – in off-grid rural areas**, for a variety of uses:

- safe drinking water supply for **communal taps**
- safe drinking water supply to **schools and health centres**
- **livestock watering irrigation** of small holder plots, communal vegetable gardens, large scale commercial farms.

In all such applications **solar pumping stands out as the only reliable, sustainable and cost-competitive alternative to diesel-fuelled pumps.**



### 3 READY KITS AND TAILOR-MADE SOLUTIONS

The OffgridSun solar pumping kits come in **3 standardized power sizes**, to suit a wide range of lift values and water flow needs. **Tailor-made solutions** are promptly designed on demand.

### STAY CONNECTED

To **control** all the functional parameters, to **collect data** and alarms, the kit 4 is equipped with a remote control **Bluetooth** system, easily visible through any smartphone.

## PUMPING KITS



**ALSO FOR IRRIGATION**

 Small Rural Activities	 School 1,000 PUPILS	 Village 1,500 PEOPLE	
	 Village 1,000 PEOPLE	 Small Rural Hospital 200 PATIENTS	
<b>SPSURFACE</b>	<b>SPK03</b>	<b>SPK04</b>	
Head meters range	0 - 10 m	20 - 100 m	70 - 130 m
Quantity m <sup>3</sup> /day range	22 - 10 m <sup>3</sup>	15 - 7,5 m <sup>3</sup>	30 - 12 m <sup>3</sup>
Solar Panels	2 x 190 W	4 x 400 W	9 x 400 W

Description	Code
 <b>SOLAR PUMPING SURFACE 24 V – HEAD: 0-20 M; FLOW: 22-10 M<sup>3</sup>/DAY</b> <ul style="list-style-type: none"> <li>• Centrifugal 24 V pump with a permanent magnet motor</li> <li>• Driver IP65 with MPPT</li> <li>• 2 x Monocrystalline PV modules FU190M Nova - 190 W</li> <li>• Possibility of battery power supply as an alternative to photovoltaics</li> </ul>	<b>SPSURFACE</b>
 <b>SOLAR PUMPING KIT 3 – HEAD: 20-100 M; FLOW: 15,0-7,5 M<sup>3</sup>/DAY</b> <ul style="list-style-type: none"> <li>• Stainless steel helical rotor solar pump</li> <li>• Electronic driver</li> <li>• IP68 electric junction kit</li> <li>• Antispikes filter</li> <li>• Electric floating sensor</li> <li>• 4 x Monocrystalline PV modules FU400M Silk® Premium</li> <li>• Aluminium module support structure</li> </ul>	<b>SPK03</b>  
 <b>SOLAR PUMPING KIT 4 – HEAD: 70-130 M; FLOW: 30,0-12,0 M<sup>3</sup>/DAY</b> <ul style="list-style-type: none"> <li>• Stainless steel helical rotor solar pump</li> <li>• Electronic driver with Bluetooth technology for remote control</li> <li>• IP68 electric junction kit</li> <li>• Antispikes filter</li> <li>• Electric floating sensor</li> <li>• 9 x Monocrystalline PV modules FU400M Silk® Premium</li> <li>• Aluminium module support structure</li> </ul>	<b>SPK04</b>

For more powerful kit, contact OffgridSun for a customized offer



# SOLAR PUMPING



MONITORING  
VIA BLUETOOTH  
WI-FI / GSM

Image taken in Mozambique,  
project with 10 solar wells for  
drip irrigation

## INVERTERS FOR EXISTING PUMPING SYSTEMS

MIDA and VASCO inverters are created to power conventional pumping systems using photovoltaic energy. These systems are ideal for lowering utility bills or avoiding wasteful electric generators.

They are suitable for all pumping powers: from 0.8 kW up to more than 100 kW.

Batteries are not needed as water will be stored in tanks and used to irrigate at the most suitable times.

These controllers are IP66 rated up to 15 kW of power. This makes the system very durable over time and little prone to failure due to the absence of batteries or other electronic components.

In addition, in cases of need, they can be powered from an AC source by disconnecting the solar power supply in advance. With built-in Bluetooth, operating parameters can be monitored and programming can be carried out. In addition, with the Wi-Fi or GSM extension it is possible to have remote access to data.

## PUMPING KITS

### NEW MIDA SOLAR

MPPT inverter for small pumps.

Quick commissioning by initial guided configuration. Built-in protections against: overvoltage and overcurrent, dry run and overtemperature. DC input voltages between 90 V and 400 V.



Description	Code
<b>MIDA SOLAR 203</b> <ul style="list-style-type: none"> <li>Motor power: 0.37 kW (1 x 230 V); 0.55 kW (3 x 230 V)</li> <li>Maximum output current: 3.5 A</li> </ul>	<b>MIDA203</b>
<b>MIDA SOLAR 205</b> <ul style="list-style-type: none"> <li>Motor power: 0.55 kW (1 x 230 V); 1.1 kW (3 x 230 V)</li> <li>Maximum output current: 5 A</li> </ul>	<b>MIDA205</b>
<b>MIDA SOLAR 207</b> <ul style="list-style-type: none"> <li>Motor power: 0.75 kW (1 x 230 V); 1.5 kW (3 x 230 V)</li> <li>Maximum output current: 7.5 A</li> </ul>	<b>MIDA207</b>

### NEW VASCO SOLAR

MPPT inverter for medium to large pumps.

Equipped with display to monitor main electrical parameters.

Possibility to connect a pressure or flow sensor. Built-in protections against: overvoltage and overcurrent, dry run and overtemperature.



Description	Code
<b>VASCO SOLAR 212</b> <ul style="list-style-type: none"> <li>DC input voltages: 160 - 650 V DC.</li> <li>Maximum output current: 12 A.</li> <li>Motor power: 2.2 kW (3 x 230 V AC)</li> </ul>	<b>VS212</b>
<b>VASCO SOLAR 409</b> <ul style="list-style-type: none"> <li>DC input voltages: 320 - 850 V DC.</li> <li>Maximum output current: 9 A.</li> <li>Motor power: 3 kW (3 x 400 V AC)</li> </ul>	<b>VS409</b>
<b>VASCO SOLAR 412</b> <ul style="list-style-type: none"> <li>DC input voltages: 320 - 850 V DC.</li> <li>Maximum output current: 12 A.</li> <li>Motor power: 4 kW (3 x 400 V AC)</li> </ul>	<b>VS412</b>
<b>VASCO SOLAR 415</b> <ul style="list-style-type: none"> <li>DC input voltages: 320 - 850 V DC.</li> <li>Maximum output current: 15 A.</li> <li>Motor power: 5.5 kW (3 x 400 V AC)</li> </ul>	<b>VS415</b>
<b>VASCO SOLAR 418</b> <ul style="list-style-type: none"> <li>DC input voltages: 320 - 850 V DC.</li> <li>Maximum output current: 18 A.</li> <li>Motor power: 7.5 kW (3 x 400 V AC)</li> </ul>	<b>VS418</b>
<b>VASCO SOLAR 425</b> <ul style="list-style-type: none"> <li>DC input voltages: 320 - 850 V DC.</li> <li>Maximum output current: 25 A.</li> <li>Motor power: 11 kW (3 x 400 V AC)</li> </ul>	<b>VS425</b>

For power higher than 11 kW, contact OffgridSun for a customized offer

# LIGHTWAVE

## SOLAR STREET LIGHTS

The technologically advanced solutions for street lighting and video surveillance. These systems share the **same structure designed and manufactured in Italy and optimized to reduce transportation costs.**

LightWave can also serve as an **emergency lighting system** in cases of breakdown or blackouts. The duration of the lighting is automatically adjusted with a considerable extension of battery life.

The lamp and electronic management are also entirely made in Italy. Lamp life: 50,000 hours.



**ALSO AVAILABLE WITH SILVER MODULES**

### LIGHTWAVE 20 W



Lamp power	20 W
Max system voltage	12 V
Light intensity	3200 lm
LED number	12
Total weight	75 kg
Battery	1 x 12 V; 100 Ah
Photovoltaic Module	190 Wp

### LIGHTWAVE 30 W



Lamp power	30 W
Max system voltage	24 V
Light intensity	4800 lm
LED number	12
Total weight	150 kg
Battery	2 x 12 V; 100 Ah
Photovoltaic Module	2 x 100 Wp

### LIGHTWAVE 40 W



Lamp power	40 W
Max system voltage	24 V
Light intensity	6400 lm
LED number	12
Total weight	150 kg
Battery	2 x 12 V; 120 Ah
Photovoltaic Module	2 x 100 Wp

### **NEW** LIGHTWAVE 50 W

The new Lightwave 50 W model with lithium batteries makes it possible to reduce the weight on the pole head and increase the life of the system

Lamp power	50 W
Max system voltage	24 V
Light intensity	8000 lm
LED number	12
Total weight	120 kg
Battery	LiFePO4 2 x 12 V; 100 Ah
Photovoltaic Module	2 x 190 Wp

Description	Code
<b>LIGHTWAVE 20 W - 12 V</b> <ul style="list-style-type: none"> <li>1 Monocrystalline PV module FU190M Nova - 190 W</li> <li>Epever Charge-controller, automatic lamp switch on/off at sunset/dawn</li> <li>1 Solar AGM battery 100 Ah - 12 V (also lithium on request)</li> <li>1 LED light 20 W - 12 V (3,200 lumen) with 5 years guarantee</li> <li>With a structure for module support, battery box and lamp arm (pole not included), cable, clamps and accessories</li> <li>Suitable for poles with top diameter between 89 and 100 mm and height 6 - 8 m</li> </ul>	<b>LWAVE20</b>
<b>LIGHTWAVE 30 W - 24 V</b> <ul style="list-style-type: none"> <li>2 Nova PV module FU100M- 100 W</li> <li>Epever Charge-controller, automatic lamp switch on/off at sunset/dawn</li> <li>2 Solar AGM battery 100 Ah - 12 V (also lithium on request)</li> <li>LED light 30 W - 24 V (4,800 lumen) with 5 years guarantee</li> <li>With a structure for module support, battery box and lamp arm (pole not included), cable, clamps and accessories</li> <li>Suitable for poles with top diameter between 89 and 100 mm and height 6 - 8 m</li> </ul>	<b>LWAVE30</b>

Description	Code
<b>LIGHTWAVE 40 W - 24 V</b> <ul style="list-style-type: none"> <li>2 Nova PV Modules FU100M - 100 W</li> <li>Epever Charge-controller, automatic lamp switch on/off at sunset/dawn</li> <li>2 Solar AGM battery 120 Ah - 12 V (also lithium on request)</li> <li>1 LED light 40 W - 24 V (6,400 lumen) with a 5-year guarantee</li> <li>With a structure for module support, battery box and lamp arm (pole not included), cable, clamps and accessories</li> <li>Suitable for poles with top diameter between 89 and 100 mm and height 6 - 8 m</li> </ul>	<b>LWAVE40</b>
<b>LIGHTWAVE 50 W - 24 V</b> <ul style="list-style-type: none"> <li>Monocrystalline PV Modules FU190M Nova - 190 W</li> <li>Epever Charge-controller, automatic lamp switch on/off at sunset/dawn</li> <li>2 lithium batteries LiFePO4 for photovoltaic systems 100 Ah - 12 V</li> <li>LED light 50 W - 24 V (8000 lumen) with 5 years guarantee</li> <li>With a structure for module support, battery box and lamp arm (pole not included), cable, clamps and accessories</li> <li>Suitable for poles with top diameter between 89 and 100 mm and height 6 - 8 m</li> </ul>	<b>LWAVE50</b>

# LAMPIONI ALL IN ONE

# ALL-IN-ONE STREET LIGHTS



For illuminating gardens, promenades, parking areas, etc. The streetlight is fully automatic, comes pre-assembled and ready to be fixed on a pole and operate immediately.

The new all-in-one streetlights have different modes of night-time operation:

- 100% light output throughout the night
- 30% light output and switching to 100% upon motion detection thanks to the integrated sensor
- power modulation (30% / 70% / 100%) according to chosen and programmable time intervals

## ALL-IN-ONE 60 W

## ALL-IN-ONE 100 W



In one extremely compact and lightweight aluminum lamp body, it contains: LED lamp, lithium battery, charge controller and photovoltaic module. Intelligent operation: lights automatically turn on at dusk and turn off at dawn.\*

\*With summer irradiance conditions and prolonged good weather conditions.



## ALL IN ONE 40 W

Description	Code
<p><b>ALL IN ONE 40 W</b></p> <ul style="list-style-type: none"> <li>• 1 x 70 W PV module</li> <li>• 1 x LiFePO4 battery - 390 Wh</li> <li>• 1 x 40 W LED lamp (luminous flux: 10,000 lumen) with programmable light profile</li> <li>• Suitable for pole with diameter from 60 mm to 80 mm and height from 6 m to 8 m</li> <li>• IP protection code: IP65</li> <li>• Weight: 19 kg</li> <li>• Product dimensions: 822 x 406 x 84 mm</li> </ul>	<p><b>ALLINONE40</b></p>

Description	Code
<p><b>ALL-IN-ONE 60 W</b></p> <ul style="list-style-type: none"> <li>• 1 x 100 W PV module</li> <li>• 1 x LiFePO4 battery - 550 Wh</li> <li>• 1 LED lamp of more than 60 W (luminous flux 15000 lumen)</li> <li>• Efficiency: 225 lm/W</li> <li>• Suitable for pole with 76 mm diameter and height between 8 m and 10 m</li> <li>• IP protection code: IP65</li> <li>• Weight: 25 kg</li> <li>• Working temperature range: - 15°C to + 70°C</li> <li>• Product dimensions: 1206 x 406 x 84 mm</li> </ul>	<p><b>ALLINONE60</b></p>
<p><b>ALL-IN-ONE 100 W</b></p> <ul style="list-style-type: none"> <li>• 1 x 130 W PV module</li> <li>• 1 x LiFePO4 battery - 825 Wh</li> <li>• 1 LED lamp of more than 100 W (luminous flux 25000 lumen)</li> <li>• Efficiency: 225 lm/W</li> <li>• Suitable for pole with 76 mm diameter and height between 10 m and 12 m</li> <li>• IP protection code: IP65</li> <li>• Weight: 30 kg</li> <li>• Working temperature range: - 15°C to + 70°C</li> <li>• Product dimensions: 1580 x 406 x 84 mm</li> </ul>	<p><b>ALLINONE100</b></p>

ALL IN ONE 40 - 60 - 100 models are also available in hybrid version with 230 V input

# MICROINVERTER



Microinverters are small inverters suitable for 1 or 2 PV modules for Plug&Play systems. The microinverter has a cable with Schuko plug for direct AC connection and a monitoring APP included.

ELECTRICAL PARAMETERS			
MODULE		HMS - 350 W	HMS - 800 W
Module power	W	280 - 470+	320 - 500+
Maximum input voltage	V	60	65
MPPT voltage range	V	16 - 60	16 - 60
Start-up voltage	V	22	22
Maximum input current	A	11.5	2 x 12.5
Maximum short-circuit current	A	1 x 15	2 x 20
Number of MPPTs		1	2
Number of Inputs per MPPT		1	1
Rated output power	W	350	800
Rated output current	A	1.52	1.52
Nominal output voltage/range <sup>1</sup>	V	230/180 - 275	230/180 - 275
Nominal frequency/range <sup>1</sup>	Hz	50/45 - 55	50/45 - 55

## MICROINVERTER 350 W



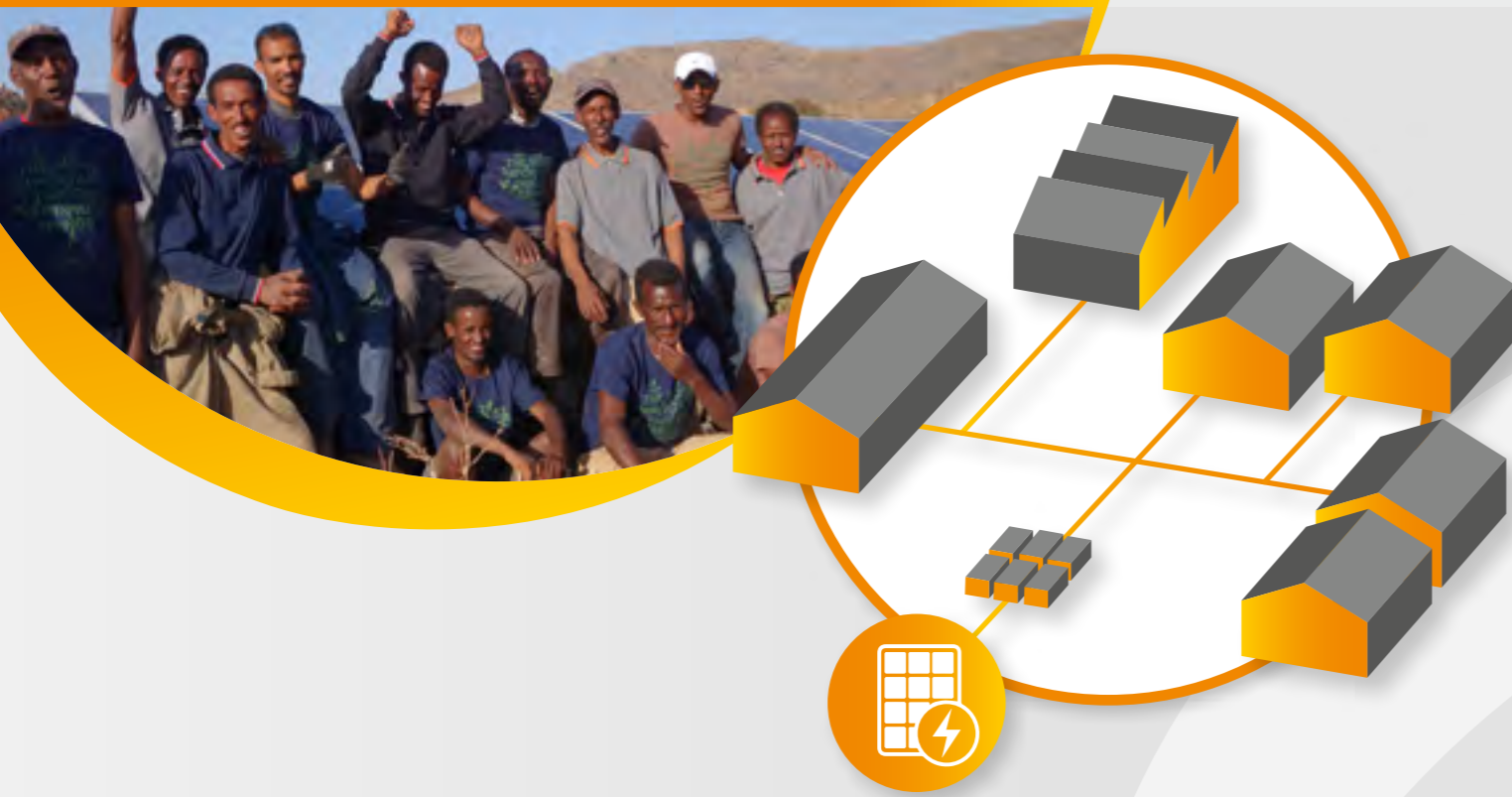
Description	Code
<ul style="list-style-type: none"> <li>1 microinverter 350 W</li> <li>1 MPPT input</li> <li>Maximum DC input power: 470 W</li> <li>1 USB Stick for Wi-Fi</li> </ul>	<b>HMS350</b>



## MICROINVERTER 800 W

Description	Code
<ul style="list-style-type: none"> <li>1 microinverter 800 W</li> <li>2 MPPT input</li> <li>Maximum DC input power per each MMPT: 500 W</li> <li>1 USB Stick for Wi-Fi</li> </ul>	<b>HMS800</b>

# MINI-GRID



Mini-grids are small electrical networks powered by one of different sources, **independent from any other electrical grid**. Their size range from 10 kW to 10 MW, which means they can power some habitations in a village up to over a couple of thousand people in a small town. Mini-grids are the proper solution to give access to electricity in places that are too costly to be reached by the national grids, and where the population density is high enough to benefit from a **collective solution**. They are useful for lighting and **domestic applications** and can meet **commercial and industrial requirements** (for example cold rooms or supermarkets).

According to the World Bank, **mini-grids can provide electricity to 500 million people by 2030**. If you need technical expertise to develop your mini-grid project, please do not hesitate to reach out to our team. OffgridSun can support the engineering of the project and provide the technical components, solar panels and storage, together with the smart meters to perfectly monitor the production and consumption of electricity for a better stability of the network.

## AN EXAMPLE OF A MINI-GRID

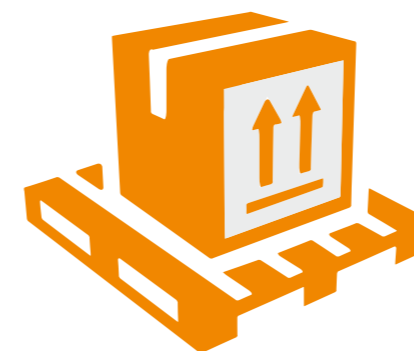
PV Modules	Inverter Max Load	Lithium batteries	Consumption meters	Included
55 kWp	60 kW AC	90 kWh	150 users	<ul style="list-style-type: none"> <li>• Wiring</li> <li>• Support structures</li> <li>• Control systems</li> </ul>

Contact us for more information and specific sizing.

# COMPONENTS FOR STAND-ALONE SOLAR PLANTS

We tested and selected the **best off-grid components** on the market to provide a catalogue of **long-lasting products**.

- PHOTOVOLTAIC MODULES
- SPECIAL PHOTOVOLTAIC MODULES
- CHARGE CONTROLLERS
- OFF-GRID INVERTERS
- HYBRID INVERTERS
- SUPERCAPACITORS
- SOLAR BATTERIES



## PACKAGING COSTS INCLUDED FOR ORDERS OVER € 1,500 \*

\*The packaging cost will be €50 for pallets with values below €1,500 (excluding VAT)

# CLASSIC PHOTOVOLTAIC MODULES

# SPECIAL PHOTOVOLTAIC MODULES



FORMS  
CUSTOM

CERTIFIED  
WARRANTY  
ACCORDING TO  
THE HIGHEST  
STANDARDS

We can supply special and customized modules based on customer needs such as **colored modules**, **semi-flexible modules** suitable for applications on boats, campers and other cases where a limited weight is necessary, modules for **photovoltaic roof tiles** and **bent tiles**, small modules, etc.



SUITABLE FOR  
STAND-ALONE  
PLANTS

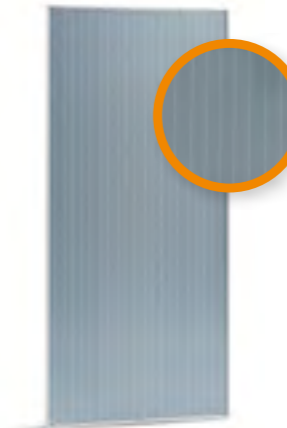


FLEXIBLE MODULES  
MINIMUM ORDER  
10 PCS



Our **high-quality modules** made with polycrystalline and monocrystalline silicon are developed by **FuturaSun**. These are the ideal solution to charge batteries in any off-grid application: campers, boats, stand-alone users, traffic signs, etc.

OffgridSun also provides **customized PV modules** made following the customer's specs and drawings. Call us for further information!



12 YEARS  
PRODUCT  
WARRANTY

25 YEARS  
PERFORMANCE  
WARRANTY



Description	Cells	Dimensions	Weight	Code
100 W SEMI FLEXIBLE PV MODULE	32	1230 x 470 x 2 mm	2,3 kg	OGS100FLEX
150 W SEMI FLEXIBLE PV MODULE	30	1088 x 800 x 2 mm	3,1 kg	OGS150FLEX

Description	Cells	Dimensions	Weight	Code
50 W POLYCRYSTALLINE PV MODULE	36	680 x 660 x 35 mm	4,5 kg	FU50P
<b>NEW</b> 100 W MONOCRYSTALLINE PV MODULE BLACK FRAME	36	790 x 577 x 30 mm	4,5 kg	FU100M BF
100 W MONOCRYSTALLINE PV MODULE	33	908 x 578 x 30 mm	6,5 kg	FU100M NOVA
165 W POLYCRYSTALLINE PV MODULE	36	1480 x 670 x 30 mm	6,8 kg	FU165P
<b>NEW</b> 190 W MONOCRYSTALLINE PV MODULE	72	1250 x 763 x 30 mm	10,2 kg	FU190M NOVA
400 W MONOCRYSTALLINE PV MODULE	120	1754 x 1098 x 30 mm	21 kg	FU400M SILK PREMIUM
<b>NEW</b> 430 W MONOCRYSTALLINE PV MODULE	108	1722 x 1134 x 30 mm	20,8 kg	FU430M Silk Nova
SILVER MONOCRYSTALLINE PV MODULE	36	1480 x 670 x 30 mm	10 kg	FU130M NEXT SILVER



## CHARGE CONTROLLERS

## INVERTERS - CHARGE CONTROLLERS



## EPEVER LS2024EU

Economical no-display 20A charge controller with PWM charging mode.



Description	Code
<ul style="list-style-type: none"> <li>For 20 A systems</li> <li>1 x USB port</li> <li>Maximum input voltage: 50 V</li> </ul>	<b>LS2024EU</b>

## EPEVER VS1024AU/VS2024AU/VS3024AU - 10/20/30 A

Solar PWM charge controller for off-grid PV systems at 12/24 V, 10/20 A

- Night mode function can be selected from the integrated display
- 2 x USB ports 2,4 A
- Usage statistics



Description	Code
<b>EPEVER VS1024AU</b> <ul style="list-style-type: none"> <li>For 10 A systems</li> <li>Maximum input voltage: 50 V</li> </ul> Max 1 x 100 W PV module at 12 V; 2 x 100 W PV modules at 24 V	<b>EPS VS1024AU</b>
<b>EPEVER VS2024AU</b> <ul style="list-style-type: none"> <li>For 20 A systems</li> <li>Maximum input voltage: 50 V</li> </ul> Max 3 x 100 W PV modules in parallel at 12 V; 6 x 100 W PV modules at 24 V or 1 x 190 W PV module at 12 V; 2 x 190 W PV modules at 24 V	<b>EPS VS2024AU</b>
<b>EPEVER VS3024AU</b> <ul style="list-style-type: none"> <li>For 30 A systems</li> <li>Maximum input voltage: 50 V</li> </ul> Max n. 4 moduli da 100 W in parallelo a 12 V o 8 moduli 100 W a 24 V oppure n. 2 moduli da 190 W a 12 V o 4 moduli da 190 W a 24 V	<b>EPS VS3024AU</b>

## EPEVER DR3210N - DDS 12/24 V - 30 A

Solar MPPT charge controller for campers and boating.

For the separate charging of several batteries (e.g. the engine battery and the service battery).

Operation at 12 or 24 V up to 30 A.



Description	Code
<ul style="list-style-type: none"> <li>Integrated display</li> <li>Separate charging of two batteries</li> <li>Max PV modules power: 400 W at 12 V; 800 W at 24 V</li> </ul>	<b>EPS DR3210N DDS</b>

NEW

## EPEVER MPPT - 12/24 V - 20 A

MPPT charge controller for 12 or 24 V 20 A solar streetlights, also suitable for lithium batteries; IP68 rating for outdoor installations



Description	Code
<ul style="list-style-type: none"> <li>Twilight function</li> <li>IP68 degree of protection</li> <li>Max module power: 260 W at 12 V or 520 W at 24 V</li> </ul>	<b>EPS Tracer5210BP</b>

## EPEVER MPPT 12/24 V - 30/40 A

MPPT charge controller for 12 or 24 V 30 or 40 A stand-alone systems; ideal for systems with 60-cell and 120-cell half-cut PV modules. Maximum input voltage 100 V



Description	Code
<ul style="list-style-type: none"> <li>Integrated display</li> <li>Max PV modules power: 390 W at 12 V or 780 W at 24 V</li> </ul>	<b>EPS TRACER3210AN</b>
<ul style="list-style-type: none"> <li>Integrated display</li> <li>Max PV modules power: 520 W at 12 V or 1040 W at 24 V</li> </ul>	<b>EPS TRACER4210AN</b>

Other models available upon request

## EPEVER MPPT 12/24/36/46/48 V - 60 A

MPPT charge controller for 12, 24, 36 or 48 V 60 A stand-alone systems, also suitable for lithium batteries; maximum module input voltage 200 V



Description	Code
<ul style="list-style-type: none"> <li>Integrated display</li> <li>Suitable for AGM and LiFePO4 batteries</li> <li>Max PV modules power: 750 W at 24 V or 1500 W at 24 V or 3000 W at 48 V</li> </ul>	<b>EPS TRACER6420AN</b>

Other models available upon request

# INVERTER

## INVERTERS - CHARGE CONTROLLERS

### PURE SINE WAVE INVERTER

These devices are the advanced solution for converting DC power (12 / 24V DC) to AC power (230 V AC) with a pure sinusoidal waveform.

Built-in overload protection, short-circuit protection, overheat protection and overvoltage protection. Suitable for use with AGM and GEL batteries.



Description	Code
<b>INVERTER 12 V 600 W</b> Pure sine wave inverter to be connected to 12 V batteries <ul style="list-style-type: none"> <li>rated power 600 W</li> <li>dimensions: 210 x 150 x 70 mm, weight 2.3 kg</li> </ul>	INV.IS600W-12V
<b>INVERTER 12 V 1000 W</b> Pure sine wave inverter to be connected to 12 V batteries V <ul style="list-style-type: none"> <li>rated power 1000 W</li> <li>dimensions: 310 x 150 x 70 mm, weight 3.5 kg</li> </ul>	INV.IS1000W-12V
<b>INVERTER 24 V 1000 W</b> Pure sine wave inverter to be connected to 24 V batteries V <ul style="list-style-type: none"> <li>rated power 1000 W</li> <li>dimensions: 310 x 150 x 70 mm, weight 3.5 kg</li> </ul>	INV.IS1000W-24V
<b>INVERTER 12 V 1500 W</b> Pure sine wave inverter to be connected to 12 V batteries <ul style="list-style-type: none"> <li>rated power 1500 W</li> <li>dimensions: 290 x 220 x 90 mm, weight 5.2 kg</li> </ul>	INV.IS1500W-12V
<b>INVERTER 24 V 1500 W</b> Pure sine wave inverter to be connected to 24 V batteries V <ul style="list-style-type: none"> <li>rated power 1500 W</li> <li>dimensions: 290 x 220 x 90 mm, weight 5.2 kg</li> </ul>	INV.IS1500W-24V
<b>INVERTER 24 V 2000 W</b> Pure sine wave inverter to be connected to 24 V batteries V <ul style="list-style-type: none"> <li>rated power 2000 W</li> <li>dimensions: 320 x 220 x 90 mm, weight 6.2 kg</li> </ul>	INV.IS2000W-24V
<b>INVERTER 24 V 2500 W</b> Pure sine wave inverter to be connected to 24 V batteries V <ul style="list-style-type: none"> <li>rated power 2500 W</li> <li>dimensions: 380 x 220 x 90 mm, weight 6.8 kg</li> </ul>	INV.IS2500W-24V
<b>INVERTER 24 V 3000 W</b> Pure sine wave inverter to be connected to 24 V batteries V <ul style="list-style-type: none"> <li>rated power 3000 W</li> <li>dimensions: 360 x 220 x 150 mm, weight 10 kg</li> </ul>	INV.IS3000W-24V

NEW

### EPEVER MPPT - 12/24 V - 20 A

MPPT charge controller for 12 or 24 V 20 A solar streetlights, also suitable for lithium batteries; IP68 rating for outdoor installations



Description	Code
<ul style="list-style-type: none"> <li>Twilight function</li> <li>IP68 degree of protection</li> <li>Max module power: 260 W at 12 V or 520 W at 24 V</li> </ul>	EPS Tracer5210BP

**OPTI-Solar**  
www.opti-solar.com

ITALY  
OFFICIAL  
DISTRIBUTOR

### OPTI-SOLAR INITIAL / HANDY

Inverters with built-in charge controller, suitable for stand-alone systems and wherever the grid electricity supply is absent, unstable or unreliable. Also suitable for anti-blackout applications.

Input: 12 V, 24 V  
Output: 230 V single phase or 230/400 V three phase  

- Pure sine wave
- Display and keyboard
- Ready to gensets or grid



Description	Code
<b>SP 1000 INITIAL-M - 12 V</b> <ul style="list-style-type: none"> <li>Off-grid inverter 12 V - 1,000 W with built-in MPPT charge controller</li> <li>Maximum Voc voltage of the module string: 102 V</li> </ul>	SP1000INITIAL-M
<b>SP 3000 INITIAL-M - 24 V</b> <ul style="list-style-type: none"> <li>Off-grid inverter 24 V - 3,000 W with built-in MPPT charge controller</li> <li>Maximum Voc voltage of the module string: 100 V</li> </ul>	SP3000INITIAL-M
<b>SP 4000 HANDY PLUS - 24 V</b> <ul style="list-style-type: none"> <li>Off-grid inverter 24 V - 3500 W/4000 VA with built-in MPPT charge controller, monitoring via bluetooth via app (up to 4 kW of photovoltaic modules)</li> <li>Maximum Voc voltage of the module string: 500 V</li> <li>It also works without batteries</li> </ul>	SP4000HP



# HYBRID INVERTER DEYE

**10 YEARS**

**WARRANTY**

# DEYE HYBRID INVERTER

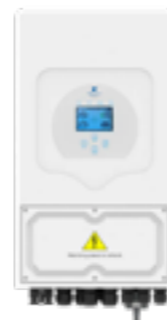


Deye hybrid inverters offer maximum versatility and meet all kinds of needs. Do you want to sell the maximum amount of energy back to the grid? Do you want to prioritize the load? Or do you want to charge the batteries first? With Optor you choose what to prioritize. The UPS (anti-blackout) function is available at full inverter power. Thanks to the division of the day into 6 time slots, you can choose whether to discharge the batteries and how much, for example by setting feed-in at peak hours and charging the batteries at times when electricity is cheap even using the grid, or by choosing to preserve energy in the batteries for the night hours.

- DC couple and AC couple to retrofit existing solar system
- Max. 10pcs in parallel for on-grid and off-grid operation
- Supports multiple batteries in parallel
- Suitable for 48 V batteries
- 6 charge and discharge modes
- Can operate without batteries
- Compatible with diesel generators
- Zero feed-in mode for immediate activation
- IP65 protection degree and high quality components
- User-friendly colour touch display

## OPTOR SINGLE 3.6 / 5 / 6 K SINGLE-PHASE HYBRID INVERTER

Hybrid inverter with 2 MPPTs and one string per MPPT.  
Maximum PV input voltage: 500 V  
Dimensions: 330 x 580 x 232 mm (WxHxD), weight 20.5 kg



Description	Code
<b>DEYE SINGLE 3.6 K</b> Single-phase inverter Maximum DC input power: 46800 W Maximum AC output power: 3960 W	<b>DEYE SUN-3.6K-SG03LP1</b>
<b>DEYE SINGLE 5 K</b> Single-phase inverter Maximum DC input power: 6500 W Maximum AC output power: 5500 W	<b>DEYE SUN-5K-SG03LP1</b>
<b>DEYE SINGLE 6 K</b> Single-phase inverter Maximum DC input power: 7800 W Maximum AC output power: 6600 W	<b>DEYE SUN-6K-SG03LP1</b>

## SUPPLY SAFETY

Important appliances can be supplied with full inverter power even in the event of a mains failure.



## SMART MONITORING PLATFORM

Monitor the performance of your plant via PC or APP.



## OPTOR TRI 6 / 8 / 10 / 12 K THREE-PHASE HYBRID INVERTER

Hybrid inverter with 2 MPPTs.  
It can supply unbalanced loads on the three phases, one phase can absorb up to 50% of the inverter's rated power.  
Maximum PV input voltage: 800 V  
Dimensions: 422 x 699,3 x 279 mm (WxHxD), weight 33,6 kg



Description	Code
<b>OPTOR TRI 6 K</b> Three-phase inverter Maximum DC input power: 7800 W Maximum AC output power: 6600 W	<b>OPTOR - 6K TRI</b>
<b>OPTOR TRI 8 K</b> Three-phase inverter Maximum DC input power: 10400 W Maximum AC output power: 8800 W	<b>OPTOR - 8K TRI</b>
<b>OPTOR TRI 10 K</b> Three-phase inverter Maximum DC input power: 13000 W Maximum AC output power: 11000 W	<b>OPTOR - 10K TRI</b>
<b>OPTOR TRI 12 K</b> Three-phase inverter Maximum DC input power: 15600 W Maximum AC output power: 13200 W	<b>OPTOR - 12K TRI</b>

## ACCESSORIES FOR PHOTOVOLTAIC SYSTEMS WITH STORAGE

### BATTERY BREAKER

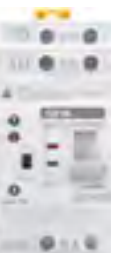
Description	Codice
125 A monopole circuit breaker for disconnecting battery power from the positive terminal	<b>INT BATT</b>



### AUTOMATIC TRANSFER SWITCH (ATS)

Automatic switching device between mains power and emergency power system

Description	Codice
• Single-phase automatic transfer switch 63 A, 230 V	<b>ATSMONO</b>
• Three-phase automatic transfer switch 63 A, 400 V	<b>ATSTRI</b>



# STORAGE SOLUTIONS

## 48 V BATTERIES



NEW

### LITHIUM BATTERIES LiFePO4 - 48 V 5,12 kWh modular design

LiFePO4 lithium-iron-phosphate batteries offer longer service life and higher performance than conventional lead-acid batteries.

Thanks to their modular design, in 5 kWh blocks, the batteries can be adapted to the capacity required by the customers and are easy to install as they are sold with their own cabinet with integrated bus bar and fuses.

The BMS protects the cells in case of anomalies: high temperature, over-current and over-voltage.

The batteries, manufactured in Europe, are suitable for 48 V systems. They are also compatible with Optor inverters.

They can therefore be used for both residential and commercial in self-consumption and for stand-alone systems.

Rack cabinets are available in versions from 2 to 8 modules.

- Expected lifespan 10 years
- European warranty
- 5-year warranty extendable to 10 if customer registers product
- 97% depth of discharge
- Easy to install
- Expansible up to 32 units in parallel

Compliance information:

- Transportation: UN38.3
- Safety: IEC 62619, IEC 63056
- CE, EN 13849-1:2015

Charging and discharging currents: 75 A (recommended), 100 A (maximum)

End-of-discharge voltage: 44.8 V; end-of-charge voltage 58.4 V

Rated capacity 5.12 kWh, usable capacity 5.0 kWh

Operating temperatures 0°C - 55°C in charge, -20°C - 50°C in discharge



Description	Dimensions	Weight	Code
<b>Rack module with 2 batteries</b> Total capacity: 10,24 kWh	530 x 495 x 476 mm	111 kg	<b>E-STORAGE CLE 2</b>
<b>Rack module with 3 batteries</b> with fuses and bus bar, total capacity: 15,36 kWh	550 x 470 x 850 mm	174.5 kg	<b>E-STORAGE FAM 3</b>
<b>Rack module with 4 batteries</b> with fuses and bus bar, total capacity: 20,48 kWh	530 x 495 x 911 mm	216.5 kg	<b>E-STORAGE CLE 4</b>
<b>Rack module with 5 batteries</b> with fuses and bus bar, total capacity: 25,60 kWh	550 x 470 x 1220 mm	279.5 kg	<b>E-STORAGE FAM 5</b>
<b>Rack module with 6 batteries</b> with fuses and bus bar, total capacity: 30,72 kWh	530 x 495 x 1341 mm	319.6 kg	<b>E-STORAGE CLE 6</b>
<b>Rack module with 8 batteries</b> with fuses and bus bar, total capacity: 40,96 kWh	550 x 470 x 1775 mm	438 kg	<b>E-STORAGE FAM 8</b>



Description	Weight	Code
<b>Lithium battery with case for wall installation</b> capacity 5.12 kWh, dimensions 515 x 208 x 518 mm	58.6 kg	<b>E-MODULE-VER</b>

Description	Weight	Code
<b>Battery LiFePO4 5.12 kWh - 48 V</b> dimensions 459 x 482 x 160 mm	47.5 kg	<b>E-MODULE-51</b>

# SUPERCAPACITORS

# 12 V BATTERIES

## GRAPHENE SUPERCAPACITORS - 48 V/DC 3,6/5,5/7,6 kWh

Supercapacitors are accumulators based on electrostatics principle, not on the chemical one like other batteries on the market. These characteristics make them insensitive to damage by deep discharge, guaranteeing up to 50,000 charge-discharge cycles.

- Safest technology
- Ultra long lifetime cycle
- Highest energy transfer efficiency
- Easy to install
- Rarely requiring maintenance

Compliance information:

- Safety: IEC62619, UL
- Transport: UN38.3, MSDS
- CE: EN 62133:2013, EN 55032:2015+AC:2016, EN 55035:2017, EN 61000-3-2:2014, EN 61000-3-3:2013

Charge Temperature: 0~+55°C  
Discharge Temperature: -20~+60°C  
Depth Of Discharge (DOD) 80~100%  
Suitable for parallel connection.



Description	Dimensions	Weight	Code
SUPERCAPACITOR 3,6 kWh	505 x 470 x 170 mm	47 kg	ULTRACAP3.6
SUPERCAPACITOR 5,5 kWh	470 x 415 x 170 mm	38 kg	ULTRACAP5.5
SUPERCAPACITOR 7,6 kWh	475 x 490 x 177 mm	46 kg	ULTRACAP7.6



## HIGH-PERFORMANCE AGM STATIONARY BATTERIES FOR OFF-GRID PV SYSTEMS



The batteries are suitable for cyclic discharge.

Description	Weight	Code
<b>Solar AGM-VRLA battery 100 Ah - 12 V</b> dimensions 330 x 173 x (h) 220 mm	29 Kg	<b>BATT100</b>
<b>Solar AGM-VRLA battery 120 Ah - 12 V</b> dimensions 330 x 173 x (h) 220 mm	30,4 kg	<b>BATT120</b>
<b>Solar AGM-VRLA battery 140 Ah - 12 V</b> dimensions 344 x 171 x (h) 280 mm	42 Kg	<b>BATT140</b>
<b>Solar AGM-VRLA battery 200 Ah - 12 V</b> dimensions 522 x 240 x (h) 224 mm	59 Kg	<b>BATT200</b>
<b>Solar AGM-VRLA battery 250 Ah - 12 V</b> dimensions 522 x 268 x (h) 226 mm	73 Kg	<b>BATT250</b>

## LFP LITHIUM BATTERIES

Maintenance-free LiFePO4 lithium batteries for photovoltaic and solar lighting applications. Thousands of charge-discharge cycles, withstands discharges up to 100% DOD. Lightweight batteries: 40-50% less weight than lead-acid batteries



Description	Weight	Code
<b>LFP battery 54 Ah - 12 V</b> dimensions 195 x 166 x (h) 175 mm	6,7 kg	<b>LI BATT50</b>
<b>LFP battery 100 Ah - 12 V</b> dimensions 307 x 168 x (h) 211 mm	13,1 kg	<b>LI BATT100</b>
<b>LFP battery 150 Ah - 12 V</b> dimensions 330 x 171 x (h) 220 mm	19,2 kg	<b>LI BATT150</b>
<b>LFP battery 200 Ah - 12 V</b> dimensions 522 x 171 x (h) 220 mm	27 kg	<b>LI BATT200</b>

GEL batteries and stationary elements OPzV and OPzS 2 V are available on request. Contact us for any personalized request.

## SALES CONDITIONS

**Applicability**

The following general sales conditions regulate the contractual relationship following the confirmation of an order. The Buyer's sales conditions will not apply, unless expressly accepted by OFFGRIDSUN SRL (hereinafter "OFFGRIDSUN") in writing. OFFGRIDSUN warranty – lasts for a period of twelve (12) years from the date of purchase – Warranty states that PV Modules shall be free of all material defects and workmanship defects, and they are suitable for the purpose they are made for, as specified in applicable technical documentation or in statements supplied with the order confirmation. If there are any defects or faults affecting the functional use of the PV Modules, OFFGRIDSUN will, at its option, either replace or repair (partially and/or totally) the flawed Modules. Any costs associated with transportation, removal and reinstallation of the PV Modules, will be covered by the Buyer.

**End of supply**

The purchasing order is irrevocable by the Buyer, and is considered to be final, only after the Buyer has received OFFGRIDSUN's formal confirmation of order. After such confirmation, the purchasing order cannot be annulled without OFFGRIDSUN's prior written acceptance. In such case OFFGRIDSUN has the faculty to claim an appropriate compensation for expenses and obligations, derived from the starting of the order processing.

The prices indicated in the catalogues/pricelists are purely indicative and may change during the validity time of the aforementioned catalogues/pricelists, due to a change in Production costs. Once confirmed, as per conditions stated in the art. 21, the sale prices indicated in the order, will become binding, except for the circumstances in which the change in Production costs is unpredictable and beyond OFFGRIDSUN's control.

With regard to the supply of the Products, and in particular of photovoltaic modules, if necessary, OFFGRIDSUN has the right to substitute modules of the same or better specification than those ordered, if these are unavailable.

**Delivery**

In conformity with the article 1510 of Italian Civil Code, the delivery takes place at OFFGRIDSUN's warehouses and is completed at the moment of loading the Products for delivery to the Buyer, carrier or the shipping agent appointed by the Buyer, unless otherwise specified in the order confirmation.

The delivery terms, unless otherwise agreed by both parties, are purely indicative. In case the order processing is disrupted by Force Majeure events, irregularity of the raw materials supply or by other unpredictable circumstances, the delivery times will be considered extended and the new ones will be agreed by the parties.

The Buyer must verify the quantity of the goods and the integrity of the package sent jointly with the carrier or the shipping agent. Eventual claims of differences in quantity or damaged packages, must be made within eight (8) days from the delivery of goods. No return of Products is allowed, unless agreed with OFFGRIDSUN in advance. In such case the Buyer will be responsible for the returned carriage and packaging.

**Force Majeure**

The Parties will not be considered responsible for any delays, incomplete or failed fulfilment of the present contract, caused by Force Majeure. Force Majeure indicates any event or circumstance independent from the will or power of the interested Party, and beyond their control, with the principles of total unpredictability and insurmountable factors. The following list of examples of Force Majeure events is not intended to be complete or stringent: lack of raw material on the national and international markets, strikes that block normal operation of a company, thefts or fire in the Supplier's headquarters that prevent or delay the Production activity, natural calamities, wars, insurrections, factum principis.

Any Force Majeure event will suspend the fulfilment of the present contract only for the duration of the event itself. The Party willing to avail of this clause, must communicate its decision to the other Party immediately through a registered letter with advice of receipt by e-mail or fax.

**Penalties for failure in collection**

If OFFGRIDSUN has informed the Buyer in writing that the Products are ready for collection and in the ten (10) days following the receiving of the communication, the Buyer does not take goods into delivery, by organizing the transportation, or does not make the delivery possible due to reasons attributable to the Buyer, OFFGRIDSUN will charge the Buyer a penalty. The penalty will correspond to one percent (1%), of the value of the non-delivered goods for each week that the delivery is delayed up to a maximum of 20% of the value of the non-delivered goods. The amount will be billed for each week of delay, after the tenth (10) day following the receipt of the above mentioned communication.

After the thirty-first (31) day following the receiving of the aforementioned communication, without the Buyer having taken the Products into delivery, OFFGRIDSUN will have the right to cancel the contract in conformity with article 1456 of Italian Civil Code, keeping as a penalty the sums already paid by the Buyer, but not exceeding twenty percent (20%) of the non-delivered goods value. OFFGRIDSUN reserves the right to claim for compensation for further damages caused by the Buyer's breach of contract.

**Ways of payment**

Payments must be made on the date/dates and with the conditions specified in the invoice sent by OFFGRIDSUN. OFFGRIDSUN reserves the right to transfer of receivables.

**Late payment or failure to pay**

In case of a down payment to be paid by the Buyer when the contract is signed, OFFGRIDSUN reserves the right to cancel an order if the down payment is delayed for more than ten (10) days following the order confirmation. In such case, the Buyer has no right to penalties or compensation for further damages.

In case of a failed timely payment by the date stated in the invoice, the Buyer will have to pay the delay interest in conformity with the Legislative Decree N° 192 from 9 Nov. 2012. OFFGRIDSUN has the right to compensation for any further damages caused by the Buyer's failure to fulfil payment conditions.

**Order suspension**

At any time, OFFGRIDSUN can decide to suspend the supply, if the Buyer's financial or economic conditions change, in conformity with article 1461 of the Italian Civil Code, or in case of a late payment of one or more instalments, with a prior notice to the Buyer.

**Retention of title**

OFFGRIDSUN retains ownership of the Products until the full payment has been received, including delay interest and any other amounts that may be due. Any act by the Buyer that, without a specific written agreement, may compromise OFFGRIDSUN's property right, will make the Buyer liable to fully compensate OFFGRIDSUN for any damage caused. The Buyer does not have the right to use any Product still owned by OFFGRIDSUN as collateral or as a guarantee to the payment of its debt. If the Buyer does so, all amounts due to OFFGRIDSUN will immediately become collectible.

In case of the resale of the Products to sub-purchasing third parties, with the written authorization of OFFGRIDSUN, the original Buyer must in all cases inform the third party of OFFGRIDSUN's retention of title on the offered Products until full payment is made.

**Technical information**

OFFGRIDSUN reserves the right to introduce any convenient or appropriate modifications to the technical characteristics of the Products, appropriate for improvement of productivity and/or safety of the Product, without any prior notice. If the Buyer proposes any technical modifications to OFFGRIDSUN's offer or order confirmation, their fulfilment becomes compulsory only with a full written agreement between the Parties.

**Warranty**

The Buyer agrees to have read the Product and Performance Warranty and accept the stated terms.

The Warranty, though, will not apply if the Buyer fails to fulfil its obligations for payment for the Products supplied by OFFGRIDSUN or other additional services provided by OFFGRIDSUN.

**Exclusion clause**

Unless otherwise agreed by the Parties in writing, the following items are not included in the supply:

- all the electric cables and ducts, except for integrated connections between the PV modules;
- all the interface boards with the public grid and string boxes;
- mounting, commissioning and final testing;
- any item or service not specified in the order confirmation.

**Intellectual Property**

OFFGRIDSUN reserves the rights, the title and intellectual property rights on documents, plans and files supplied to the Buyer.

The Buyer agrees not to supply the documents to third parties, or divulge its complete or partial contents, without written consent from OFFGRIDSUN.

**Disputes**

All rights and obligations of the Parties are governed by the Italian law with the exclusion of the UN Convention on international sales contracts (Wien, 1980).

For any dispute concerning the contracts signed by OFFGRIDSUN, their interpretation and/or their execution, the exclusive place of jurisdiction is Padua Court (Italy).

Any eventual disputes regarding the Products do not exonerate the Buyer from fulfilment of the payment terms, the contractual obligations and any other provisions provided in this document.

**Privacy**

In compliance with the legislative decree N°196/2003, the Buyer has been informed that their personal data are inserted into OFFGRIDSUN's database. This is necessary for the correct progression of the contractual workflow and fulfilment of some law provisions, for statistics, sales, marketing and promotional purposes, credit tutelage and management, and transfer of receivables. The Buyer's personal data is processed with the aid of automated and paper means by authorized personnel, with the use of security measures to guarantee its confidentiality. The Buyer's personal data can be communicated to public authorities, subsidiaries of the group, debt collection firms or companies, holdings and associations with commercial, marketing purposes or for market research. The Buyer can contact OFFGRIDSUN - the data controller, to exercise their rights listed in the aforementioned Legislative Decree. For this purpose, the Buyer has been informed that they can have access to their personal data at any time, request a data update, rectification or cancellation and/or oppose the data processing.

The Buyer

\_\_\_\_\_  
Stamp and signature of the legal representative

TO BE WRITTEN ON THE FRONT SIDE OF THE ORDER

In conformity with articles 1341 and 1342 of the Italian Civil Code, the customer states to expressly approve the following clauses: 1 ; 2; 3; 9; 11; 14.

The Buyer

\_\_\_\_\_  
Stamp and signature of the legal representative



**WITHOUT  
MIDDLEMEN**

**GOLD STANDARD  
CERTIFIED  
PROJECTS**

OffgridSun is a developer of Goldstandard certified carbon credit projects for major global companies.

We are currently implementing projects in Tanzania, Kenya and Zambia.

**Contact us for more information.**

#### AREAS OF ACTION

- ✓ **SAFE WATER ACCESS**
- ✓ **IMPROVED COOKSTOVES**

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