



PRICE LIST 2024 CONTENTS

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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.

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



	OFFGRIDSUN	:
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COMPONENTS FOR STAND-ALONE SOLAR PLANTS **CLASSIC PHOTOVOLTAIC MODULES FuturaSun** SPECIAL PHOTOVOLTAIC MODULES 21 CHARGE CONTROLLERS EPEVER 22 **OFF-GRID INVERTERS Opti-Solar** 23 **HYBRID INVERTERS FuturaSun Optor** 24 26 48 V batteries 27 28 **Supercapacitors** 12 V Batteries 29 **SALES CONDITIONS** 30

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MINIGRID

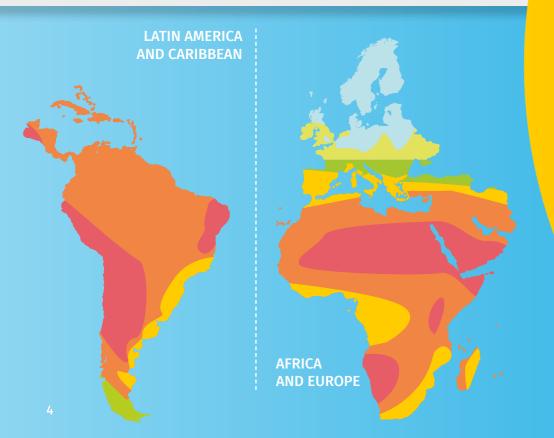








GLOBAL SOLAR IRRADIATION





SOLAR HOME KIT



PRE-CONFIGURED KITS



SOLAR HOME KIT 380 W - 230 V

A small kit for AC loads

Irradiation Group	GR1	GR2	GR3	GR4	GR5	GR6
Irradiance [kWh/m², day]	6	5	4	3	2	1
Daily Energy production [kWh]	2,2	1,9	1,5	1,1	0,7	0,3
Days of autonomy*	1,4	2	1,9	2,6	3,8	7,6



Description

• 2 Monocrystalline PV modules FU190M NEXT - 190 W

• 1 Inverter-charger SP3000 Initial-P, input 12 V, output 1,000 W - 230 V

1 Solar AGM battery 140 Ah – 12 V

Code

SHOME380

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 kit, without inverter, ideal for lighting and phone charging.

SOLAR HOME 380, 800 and 3200 provide 230 V AC electricity for all the common appliances from TVs to radios or even refrigerators. Our inverter/charger allows the connection to a diesel generator or to the electrical grid, if available, and is able to manage these different sources of energy at the same time.

SOLAR HOME KIT 800 W - 230 V

A medium size kit for AC loads

Irradiation Group	GR1	GR2	GR3	GR4	GR5	GR
Irradiance [kWh/m², day]	6	5	4	3	2	1
Daily Energy production [kWh]	4,8	4	3,2	2,4	1,6	0,8
Days of autonomy*	1,4	1,7	2	2,8	4,2	8



Description

Description

• 2 Monocrystalline PV modules FU400M Silk® Premium - 400 W

• 1 Inverter-charger SP3000 Initial-M, input 24 V, output 3,000 W - 230 V

2 Solar AGM battery 140 Ah – 12 V

SHOME800

Code

Code SHOME3200

SOLAR HOME KIT 100 W - 12 V

A small kit for DC loads

Irradiation Group	GR1	GR2	GR3	GR4	GR5	GR6
Irradiance [kWh/m², day]	6	5	4	3	2	1
Daily Energy production [kWh]	0,6	0,5	0,4	0,3	0,2	0,1
Davs of autonomy*	2.8	3.5	4.3	5.6	8.7	17.5



2,8 3,5 4,3 5,6 8,7 17,3	
Description	Code
 1 Polycrystalline PV module, FU100P3 - 100 W 1 Charge regulator VS1024AU with display and USB ports 1 Solar AGM battery 100 Ah - 12V 3 LED bulbs 8 W - 12/24 V (800 lumen) 	SHOME100
 1 Polycrystalline PV module FU100P3 - 100 W 1 Charge regulator VS1024AU with a display and USB ports 1 Inverter input 12 V, output 500 W - 230 V 1 Solar AGM battery 100 Ah - 12V 3 LED bulbs 8 W - 12/24 V (800 lumen) 	SHOME100AC

SOLAR HOME KIT 3200 W - 230 V

A large size kit for AC loads

Irradiation Group	GR1	GR2	GR3	GR4	GR5	GR6
Irradiance [kWh/m², day]	6	5	4	3	2	1
Daily Energy production [kWh]	19,2	16	12,8	9,6	6,4	3,2
Days of autonomy*	1	1,2	1,5	2	3	6







• 8 Monocrystalline PV modules FU400M Silk* Premium - 400 W

1 Hybrid inverter Optor Single 3K - 48 V

4 Solar AGM battery 200 Ah - 12 V

*Considering that the daily consumption amounts to half of the daily production.

SOLAR BALCONY KIT

PORTABLE SOLAR KITS





The plug-and-play kit makes your balcony produce energy:

- · WiFi gateway for control via app included
- Plug-and-play system up to 800 W
- · CEI-021 certified microinverter for network connection
- · Ideal for installations on balconies, terraces, gardens

SOLAR BALCONY 400 W

De	scription	Code
	2 Monocrystalline PV modules FU190M NEXT - 190 W 1 Microinverter HMS-350 W	BALCSOL
•	1 Cable with Schuko socket	

SOLAR BALCONY 800 W

	Description	Code
EW	 2 Monocrystalline PV modules FU400M Silk* Premium - 400 W 1 microinverter HMS-800 W 	BALCSOLMAX
	1 Cable with Schuko socket	

POWER CORE

The portable kit with 300 W of AC power. Equipped with a 25 Ah lithium battery (LiFePO4) and 19 V DC output to charge the laptop. Once charged, it runs for 45 hours.*



De	escription	Code
	12.8 V - 25 Ah lithium battery (LiFePO4) 1 Polycrystalline PV module, FU100P3 - 100 W (dimensions: 1020 x 670 x 30mm) Integrated 300 W / 230 VAC inverter 2 x 3 W LED lights with 5 m long cable and with long service life (4000 charge/discharge cycles)	PCORE
•	1 Grid battery charger	
	1 Reading light 0,2 W	
	Connectors for connection to photovoltaic module	

^{*} Operating time only with the lights on.

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.



De	scription	Code
	1 x 30 W polycrystalline PV module with 5 meters long cable (dimensions: 630 x 340 x 17 mm) Box with charge controller and Lithium rechargeable battery 18 Ah/12 V with high thermal resistance and long service life 12 V outputs	POWERBOX30
	3 x 3 W LED lights with 3 m long cable 1 USB port for phone charging 1 Kit of phone charge adapters	



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
 ENERGY STATION NEXT - 15 W 1 x 15 W polycrystalline PV module (dimensions: 365 x 365 x 30 mm) Box with charge controller and new rechargeable battery LiFePO4, 6,000mAh/6.4 V with high thermal resistance and long service life (4,000 charging cycles) 3 LED bulbs 1.6 W (tot. light output 500 lm), with 3-6-8 m cables with switch buttons 2 USB ports for phone charging 1 Kit of phone charge adapters 1 AM/FM/SW portable radio & MP3 reader chargeable via USB 3 W Speaker, 2,000 mAh/3.7 V Li-ion battery 	ESNEXT
 1 x 10 W polycrystalline PV module (dimensions: 340 x 235 x 17 mm) Box with charge controller and new rechargeable battery LiFePO4, 6,000 mAh/6.4 V with high thermal resistance and long service life (4,000 charging cycles) 2 LED bulbs 2 W, 1 LED bulb 1 W (tot. light output 500 lm), with 3-6-8 m cables with switch buttons 2 USB ports for phone charging 1 Kit of phone charge adapters 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 LiFePO4 battery. 1 AM/FM/SW portable radio & MP3 reader chargeable via USB 3 W Speaker, 1,200 mAh/3.7 V Li-ion battery 	ESPREMIUM



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 m² 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

PUMPING KITS

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 dieselfuelled pumps.



READY KITS AND TAILOR-MADE SOLUTION:

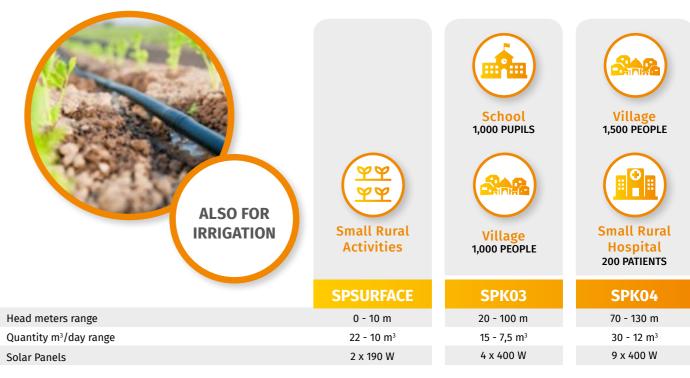
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The OffgridSun solar pumping kits come in **3 standardized power sizes**, to suit a wide range of lift values and water flow needs. **Tailor-made solutions** are promptly designed on demand.



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.





Description	Code
 Centrifugal 24 V pump with a permanent magnet motor Driver IP65 with MPPT 2 x Monocrystalline PV modules FU190M NEXT - 190 W Possibility of battery power supply as an alternative to photovoltaics 	SPSURFACE
SOLAR PUMPING KIT 3 – HEAD: 20-100 M; FLOW: 15,0-7,5 M³/DAY	SPK03
 Stainless steel helical rotor solar pump Electronic driver IP68 electric junction kit Antispike filter Electric floating sensor 4 x Monocrystalline PV modules FU400M Silk* Premium Aluminium module support structure 	BEST SELLER
 Solar Pumping Kit 4 - Head: 70-130 M; Flow: 30,0-12,0 M³/DAY Stainless steel helical rotor solar pump Electronic driver with Bluetooth technology for remote control IP68 electric junction kit Antispike filter Electric floating sensor 9 x Monocrystalline PV modules FU400M Silk® Premium Aluminium module support structure 	SPK04

LIGHTWAVE

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.



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



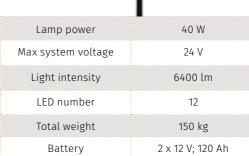
Lamp power	30 W
Max system voltage	24 V
Light intensity	4800 lm
LED number	12
Total weight	150 kg
Battery	2 x 12 V; 100 Ah
Photovoltaic Module	2 x 100 Wp

Description	Code
LIGHTWAVE 20 W - 12 V	LWAVE20
 1 Monocrystalline PV module FU190M NEXT - 190 W Epever Charge-controller, automatic lamp switch on/off at sunset/dawn 1 Solar AGM battery 100 Ah - 12 V (also lithium on request) 1 LED light 20 W - 12 V (3,200 lumen) with 5 years guarantee With a structure for module support, battery box and lamp arm (pole not included), cable, clamps and accessories Suitable for poles with top diameter between 89 and 100 mm and height 6 - 8 m 	
LIGHTWAVE 30 W - 24 V	LWAVE30
 2 Polycrystalline PV module FU100P3- 100 W Epever Charge-controller, automatic lamp switch on/off at sunset/dawn 2 Solar AGM battery 100 Ah – 12 V (also lithium on request) LED light 30 W - 24 V (4,800 lumen) with 5 years guarantee With a structure for module support, battery box and lamp arm (pole not included), cable, clamps and accessories Suitable for poles with top diameter between 89 and 100 mm and height 6 - 8 m 	

SOLAR STREET LIGHTS

LIGHTWAVE 40 W





2 x 100 Wp

Photovoltaic Module

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 Description	Code
IGHTWAVE 40 W - 24 V	LWAVE40
2 Polycrystalline PV Modules FU100P3 - 100 W Epever Charge-controller, automatic lamp switch on/off at sunset/dawn 2 Solar AGM battery 120 Ah – 12 V (also lithium on request) 1 LED light 40 W - 24 V (6,400 lumen) with a 5-year guarantee With a structure for module support, battery box and lamp arm (pole not included), cable, clamps and accessories Suitable for poles with top diameter between 89 and 100 mm and height 6 - 8 m	
IGHTWAVE 50 W - 24 V	LWAVE50
Monocrystalline PV Modules FU190M NEXT - 190 W Epever Charge-controller, automatic lamp switch on/off at sunset/dawn 2 lithium batteries LiFePO4 for photovoltaic systems 100 Ah - 12 V LED light 50 W - 24 V (8000 lumen) with 5 years guarantee With a structure for module support, battery box and lamp arm (pole not included), cable, clamps and accessories Suitable for poles with top diameter between 89 and 100 mm and height 6 - 8 m	

ALL-IN-ONE STREET LIGHTS





ARCLIGHT 20 W

The solution for illuminating gardens, walks, parking areas, etc. The streetlight is fully automatic, already pre-assembled to be immediately fixed on a pole and ready to work.

The single lamp body in aluminum, extremely compact and light, contains: LED lamp, lithium battery, charge controller and photovoltaic module.

Intelligent operation: lights automatically turn on at dusk and turn off at dawn.*

^{*} in the summer irradiation conditions and in conditions of prolonged good weather



Description	Code
ARCLIGHT 20 W	ARCLIGHT20
 1 x 45 W PV module 1 x LiFePO4 battery - 275 Wh - 4,000 cycles 1 x 40 W LED lamp (luminous flux: 3,000/4,200 lumen) with programmable light profile Suitable for pole with 60 mm diameter and height < 6 m IP protection code: IP65 Weight: 16 kg Product dimensions: 580 x 580 x 256 mm 	
ALL-IN-ONE 40 W	ALLINONE40
 1 x 90 W PV module 1 x LiFePO4 battery - 550 Wh 1 x 40 W LED lamp (luminous flux: 8,000 lumen) with programmable light profile Suitable for pole with diameter from 60 mm to 80 mm and height from 6 m to 10 m IP protection code: IP65 Wight: 25 kg Product dimensions: 1295 x 350 x 80 mm 	

ALL-IN-ONE 40 W



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







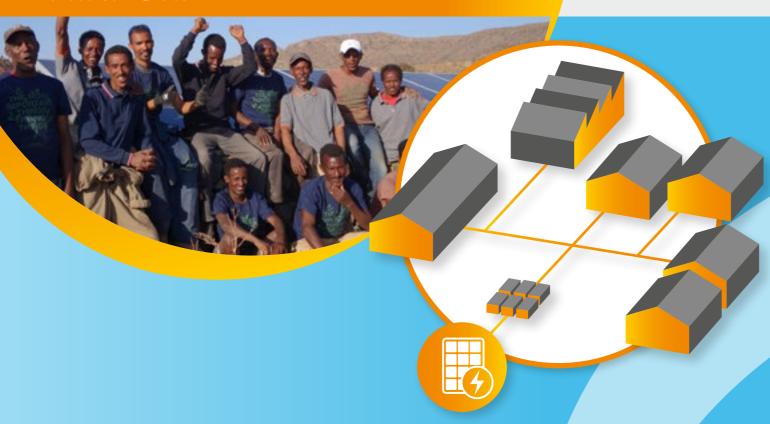
Description	Code
ALL-IN-ONE 60 W	ALLINONE60

- 1 x 100 W PV module
- 1 x LiFePO4 battery 550 Wh
- 1 LED lamp of more than 60 W (luminous flux 15000 lumen)
- Efficiency: 225 lm/W
- Suitable for pole with 76 mm diameter and height between 8 m and 10 m
- IP protection code: IP65
- · Weight: 25 kg
- Working temperature range: 15°C to + 70°C
- Product dimensions: 1206 x 406 x 84 mm

ALL-IN-ONE 100 W ALLINONE100

- · 1 x 130 W PV module
- 1 x LiFePO4 battery 825 Wh
- 1 LED lamp of more than 100 W (luminous flux 25000 lumen)
- Efficiency: 225 lm/W
- Suitable for pole with 76 mm diameter and height between 10 m and 12 m
- IP protection code: IP65
- · Weight: 30 kg
- Working temperature range: 15°C to + 70°C
- Product dimensions: 1580 x 406 x 84 mm

MINI-GRID



Mini-grids are small electrical networks powered permarkets). by one of different sources, independent from any According to the World Bank, mini-grids can provide other electrical grid. Their size range from 10 kW to electricity to 500 million people by 2030. 10 MW, which means they can power some habita- If you need technical expertise to develop your mitions in a village up to over a couple of thousand ni-grid project, please do not hesitate to reach out people in a small town.

density is high enough to benefit from a **collective** sumption of electricity for a better stability of the **solution**. They are useful for lighting and **domestic** network. applications and can meet commercial and industrial requirements (for example cold rooms or su-

to our team. OffgridSun can support the engineering Mini-grids are the proper solution to give access to of the project and provide the technical componenelectricity in places that are too costly to be reached ts, solar panels and storage, together with the smart by the national grids, and where the population meters to perfectly monitor the production and con-

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**





Contact us for more information and specific sizing.



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



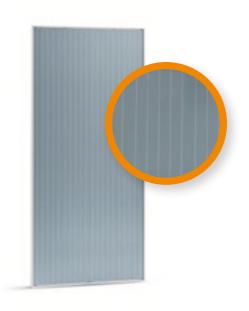
Our **high-quality modules** made with polycrystalline and monocrystalline silicon are developed by **FuturaSun.** These are the ideal solution to charge batteries in any off-grid application: campers, boats, stand-alone users, traffic signs, etc.

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













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 necesary, modules for **photovoltaic roof tiles** and **bent tiles**, small modules, etc.

Description	Cells	Dimensions	Weight	Code
100 W SEMI FLEXIBLE PV MODULE WITH MULTIWIRE CELLS	32	940 x 610 x 3 mm	2,1 kg	OGS100FLEX-MBB
110 W SEMI FLEXIBLE PV MODULE WITH BACK CONTACT CELLS	32	1070 x 540 x 3 mm	2,18 kg	OGS110FLEX-IBC
SILVER MONOCRYSTALLINE PV MODULE	36	1480 x 670 x 30 mm	10 kg	FU130M NEXT SILVER

EPS Tracer5210BP

CHARGE CONTROLLERS

INVERTERS - CHARGE CONTROLLERS



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

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



- 2 x USB ports 2,4 A
- Usage statistics



Description	Code
 EPEVER VS1024AU For 10 A systems Max 1 x 100 W PV module at 12 V; 2 x 100 W PV modules at 24 V 	EPS VS1024AU
 EPEVER VS2024AU For 20 A systems 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 	EPS VS2024AU
 EPEVER VS3024AU For 30 A systems Max 4 x 100 W PV modules in parallel at 12 V; 8 x 100 W PV modules at 24 V or 2 x 190 W PV modules at 12 V: 4 x 190 W PV modules at 24 V 	EPS VS3024AU

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.



De	escription	Code
	Integrated display Separate charging of two batteries Max PV modules power: 400 W at 12 V; 800 W at 24 V	EPS DR3210N DDS

EPEVER MPPT 12/24/46/48 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



De	scription	Code
	Integrated display	EPS TRACER6420AN
•	Suitable for AGM and LiFePO4 batteries	
•	Max PV modules power: 1500 W at 24 V or 1000 W at 24 V or 3000 W at 48 V	



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 Twilight function

IP68 degree of protection Max module power: 260 W at 12 V or 520 W at 24 V



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
SP 1000 INITIAL-M - 12 V	SP1000INITIAL-M
 Off-grid inverter 12 V - 1,000 W with built-in MPPT charge controller Maximum Voc voltage of the module string: 102 V 	
SP 3000 INITIAL-M - 24 V	SP3000INITIAL-M
 Off-grid inverter 24 V - 3,000 W with built-in MPPT charge controller Maximum Voc voltage of the module string: 100 V 	
SP 4000 HANDY PLUS - 24 V	SP4000HP
 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) Maximum Voc voltage of the module string: 500 V It also works without batteries 	

HYBRID INVERTER OPTOR



FUTURASUN OPTOR HYBRID INVERTER



Optor 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
- 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

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 SINGLE 3 / 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
OPTOR SINGLE 3 K Single-phase inverter Maximum DC input power: 3900 W Maximum AC output power: 3300 W	OPTOR - 3K HP1
OPTOR SINGLE 5 K Single-phase inverter Maximum DC input power: 6500 W Maximum AC output power: 5500 W	OPTOR - 5K HP1
OPTOR SINGLE 6 K Single-phase inverter Maximum DC input power: 7800 W Maximum AC output power: 6600 W	OPTOR - 6K HP1

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



48 V BATTERIES

STORAGE SOLUTIONS



storage





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	Weight	Code
Battery LiFePO4 5.12 kWh - 48 V dimensions 459 x 482 x 160 mm	47.5 kg	E-MODULE-5.1





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

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

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
LFP battery 54 Ah - 12 V dimensions 229 x 138 x (h) 217 mm	6,7 kg	LI BATT54
LFP battery 100 Ah - 12 V dimensions 328 x 172 x (h) 220 mm	13,1 kg	LI BATT100
LFP battery 150 Ah - 12 V dimensions 483 x 170 x (h) 240 mm	19,2 kg	LI BATT150
LFP battery 200 Ah - 12 V dimensions 522 x 238 x (h) 220 mm	27 kg	LI BATT200

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

SALES CONDITIONS

Offgrid Sun

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 V Modules, will be covered by the Buyer

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

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. 2.1, 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

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

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.

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. The amount will be billed 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)

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

ments 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

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 nent, 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.

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

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.

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.

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 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

Stamp and signature of the legal representative





Want to make your company comp<mark>letely carbon neutral? Then carbon credits can be helpful!</mark>

OffgridSun directly develops projects that generate carbon credits certified according to the major international standards.

This way you can buy credits directly from the producer, without all the middlemen that usually double the cost.

Contact us for more information.

AREAS OF ACTION



SAFE WATER ACCESS



IMPROVED COOKSTOVES

