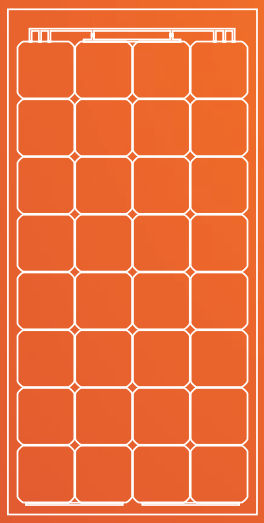
SOLBIAN



THE SUN SHINES EVERYWHERE SO DO WE.

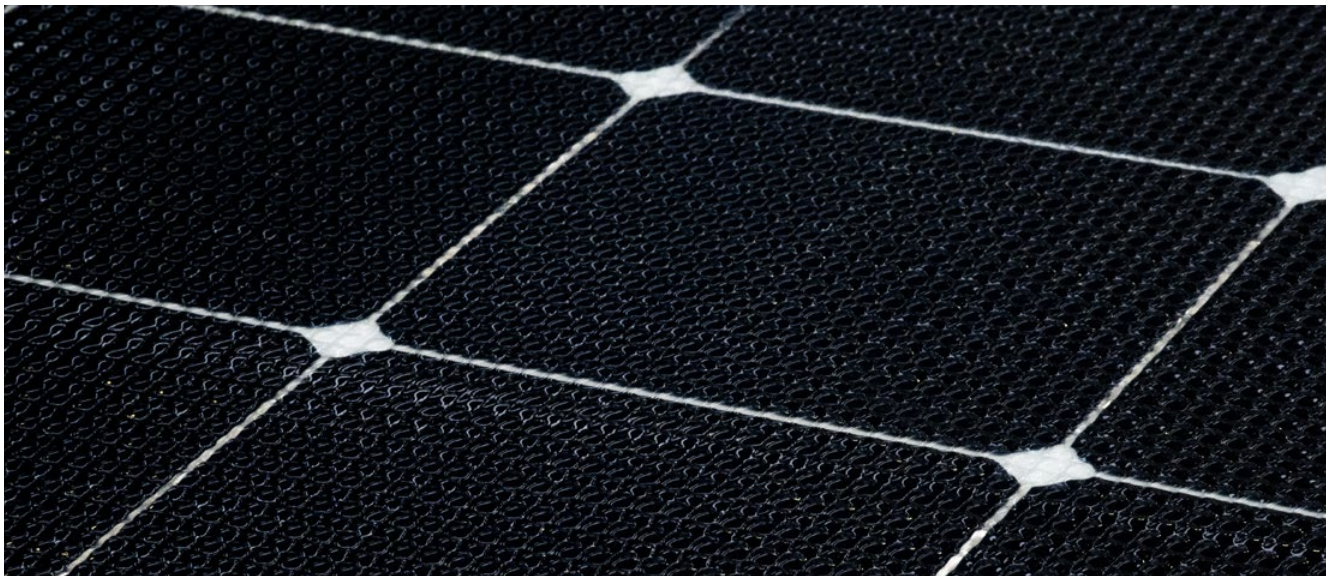
Flexible solar panels, engineered for every environment.

solbian.eu

Made in Italy

PRODUCT QUALITY, DURABILITY AND MAXIMUM PERFORMANCE, ALWAYS.

Many good reasons to choose Solbian



A complete solution, not just a panel

From design to installation, we support every step of your project with expert technical guidance and customization.

Engineered to match any platform

We customize size, shape, output, materials, and mounting to match your specific surface and energy requirements.

Lightweight and aerodynamic

Panels weigh as little as 2.4 kg/m² and adapt to curved surfaces, such as the spoiler of a truck, the roof of a car or the deck of a boat.

Tested in extreme environments

Used by elite sailors and explorers, Solbian panels are proven to perform under intense mechanical and weather stress.

Plug-and-play integration

With options like the ALLinONE system, setup is fast and intuitive, even for non-specialists.

Certified quality

Our products are certified according to IEC 61701 (salt mist). Solbian has also obtained ISO 9001, ISO 45001:18 and ISO 14001:15 Quality certifications.

ISO 14001:15
ISO 45001:18
Swiss Certified

kiwa CERTIFIED
IEC 61701 Salt mist test

ACCREDIA

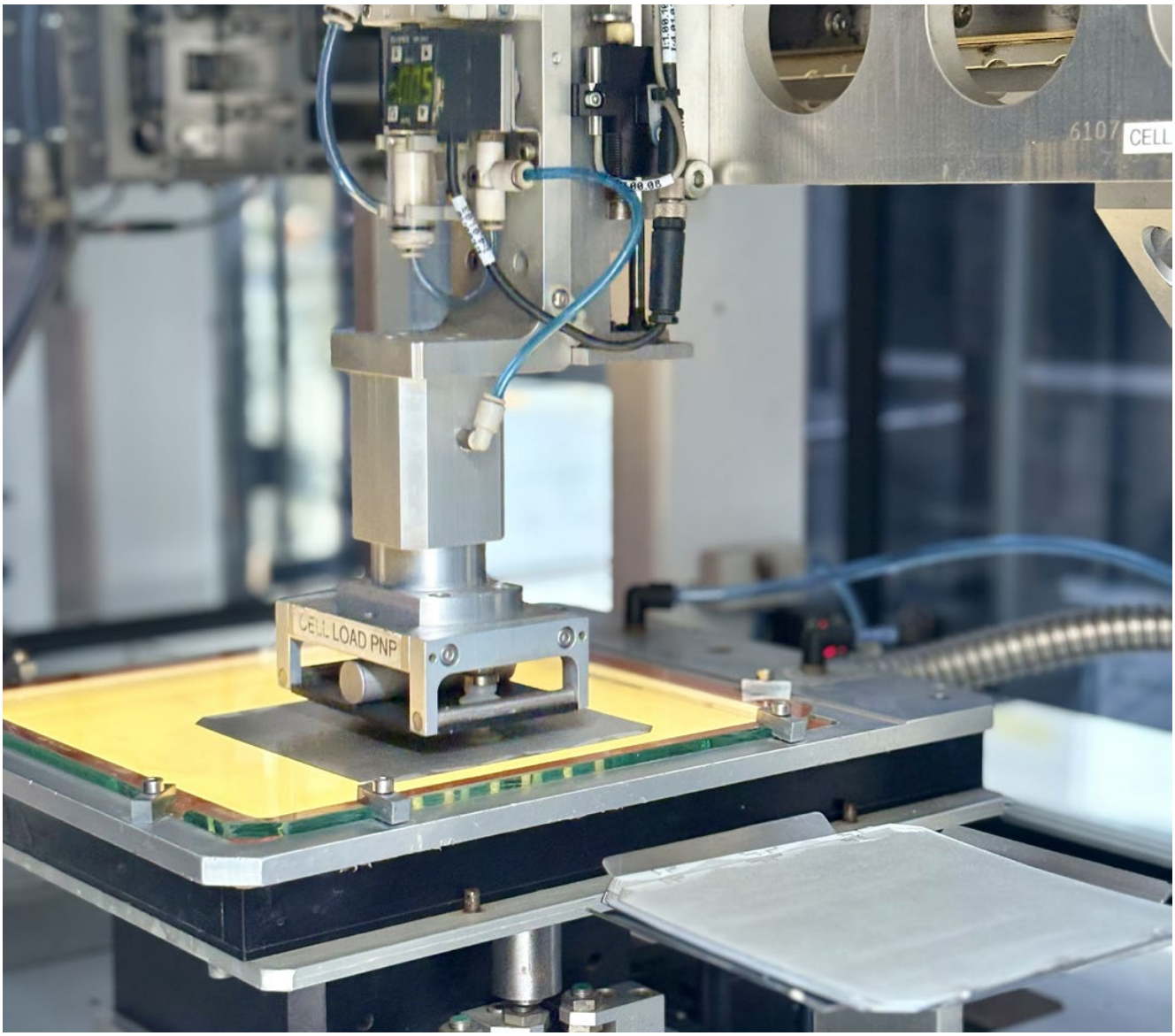
CERTIFIED SYSTEM
IQS ISO 9001
CSYD

CE

RoHS COMPLIANT

SOMETHING NEW UNDER THE SUN

Solbianflex technology



Multiple power configurations, all winners.

No task is too hard for Solbianflex technology, offering a wide range of power options. Flexible solar panels made with crystalline silicon cells, the most efficient and proven on the market, combined with lightweight and flexible encapsulation materials.

EVERYTHING YOU NEED TO HARNESS THE SUN

The photovoltaic set



Panel

Lightweight and extraordinarily flexible, able to adapt to curved surfaces.

Cables

For the wiring, provided at required length.





Connectors

Absolutely waterproof, safe and easily removable electrical connections.

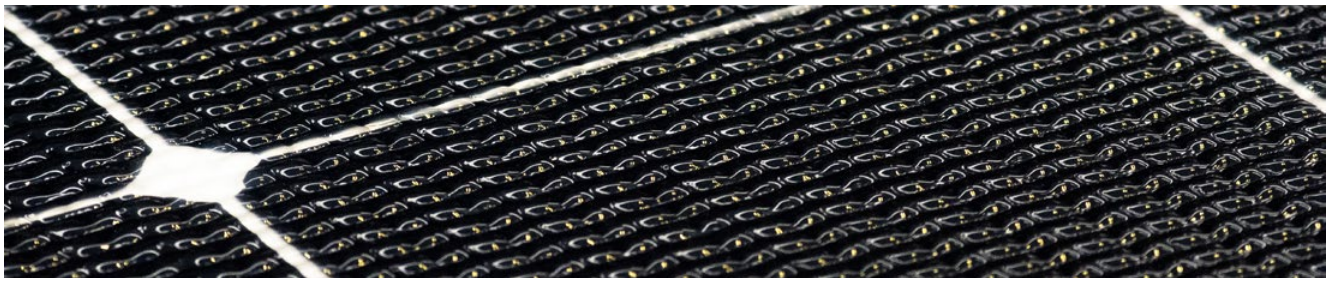
Controller

Perfect combination between the solar panel and the battery to be charged.



POWER AT THE HIGHEST LEVEL

SP Series



The SP series is at the top of the range, thanks to the use of SunPower back-contact solar cells, able to convert up to 25.9% of sunlight into electricity and with a pleasant appearance thanks to the electrical contacts hidden on the back. Back-contact cells represent the most advanced technology on the market, and make the SP Solbian panels the highest-efficiency flexible panels.

	SP 60	SP 48	SP 44	SP 40	SP 36 L	SP 36Q	SP 32	SP 24	SP 16 L	SP 16 Q
Power at STC [W] ①	213	170	156	142	128	128	114	85	57	57
Length [mm]	1363	1109	1490	1363	1236	855	1109	855	1109	601
Width [mm]	800	800	546	546	546	800	546	546	292	546
Thickness [mm]	2									
Weight [kg]	2.6	2.1	2	1.8	1.6	1.6	1.5	1.1	0.8	0.8
PV solar cells no.	60	48	44	40	36	36	32	24	16	16

SUPER RUGGED SERIES

SR Series



The monocrystalline high efficiency SR cells are sandwiched by two patented metallic grids. The metallic grid on the front of the cell is specifically designed to maximize the current harvesting. On the rear of the cell a second grid provides extreme resistance to cracks and over-bending. The grids essentially form a double shield that acts as a conducting reinforcement to the solar cell. Extreme crack and bend tolerance are built in, providing a guarantee of high efficiency and unmatched durability.

	SR 48	SR 36 L	SR 36 Q	SR 32	SR 24	SR 16 L	SR 16 Q	SR 14
Power at STC [W] ①	240	180	180	160	120	80	80	70
Length [mm]	1379	1540	1058	1379	1058	1379	736	1219
Width [mm]	1013	691	1013	691	691	370	691	370
Thickness [mm]	2							
Weight [kg]	3.4	2.6	2.6	2.3	1.8	1.2	1.2	1.1
PV solar cells no.	48	36	36	32	24	16	16	14

① Values at STC = Standard Test Conditions: (a) light spectrum for an air mass of 1.5; (b) irradiance of 1000 W/m² with perpendicular incidence and (c) cell temperature of 25 °C. Measurements carried out according to the Standard IEC 61215 requirements.

SOLAR KIT FOR LIFELINES

SunBoard



SunBoard is a complete energy solution specifically engineered for direct installation onto boat lifelines. This system features Solbian's signature high-efficiency solar panel, now evolved into a rigid module thanks to an advanced honeycomb-structured backing.

Designed for maximum energy harvesting, the integrated mounting system allows for full adjustability. With a range of motion from 0 to 90 degrees, you can easily orient the panel to follow the sun's path and maximize your power output throughout the day.

	SD 31	SD 23
Power at STC [W] ①	110	82
Length [mm]	1073	819
Width [mm]	556	
Thickness [mm]	10	
Weight [kg]	2.8	2.2
PV solar cells no.	31	23

SOLAR PANELS AND KITS

SunBender



Experience the future of energy with our state-of-the-art photovoltaic kit, meticulously crafted to meet all your power needs.
The SunBender Solar Kit includes a Solbian solar panel made with exclusive prime SunPower Maxeon PV cells, an MPPT Genasun charge controller, and all the necessary cables for a seamless installation.

	SB 47	SB 31	SB 15
Power at STC [W] ①	164	108	52
Length [mm]	1054		
Width [mm]	800	564	292
Thickness [mm]	2		
Weight [kg]	2	1.4	0.7
PV solar cells no.	47	31	15

	Sunbender KL	Sunbender KM	Sunbender KS
Description	Kit consisting of a SunBender solar panel, an MPPT charge controller, and cables with Plug & Play connectors		
PV panel	SB 47	SB 31	SB 15
Charge controller	Genasun GV-10		Genasun GVB-8
Battery	12 V Lead acid/4S $LiFePO_4$		

① Values at STC = Standard Test Conditions: (a) light spectrum for an air mass of 1.5; (b) irradiance of 1000 W/m² with perpendicular incidence and (c) cell temperature of 25 °C. Measurements carried out according to the Standard IEC 61215 requirements.

CONTROL YOUR SYSTEM WHEREVER YOU ARE

The ALLinONE environment





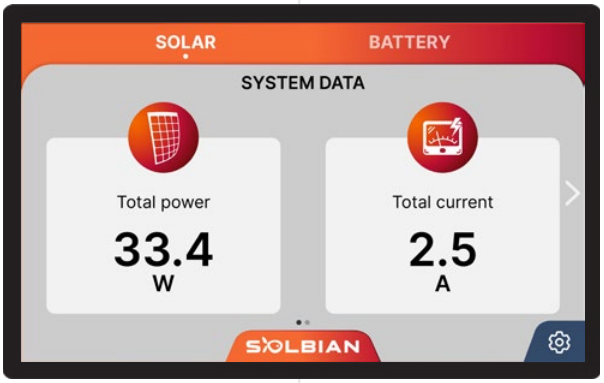
Web interface

Stay connected to your solar photovoltaic system like never before.
The new web interface lets you monitor real-time performance and adjust settings with ease. Whether tracking energy output or fine-tuning your setup, it provides full control and insight from any device, ensuring your panels always operate at peak efficiency.

CURRENTLY IN DEVELOPMENT

Display

Designed for flush mounting, this modern 4.3” touchscreen display offers a clear and immediate view of your system’s key data.
It provides direct access to charge controller information and detailed battery status, all in a compact, user-friendly format.
Fully integrated and cable-free, the display ensures smooth interaction through a responsive interface and wireless connectivity.



FREEDOM MADE-TO-MEASURE

Custom panels

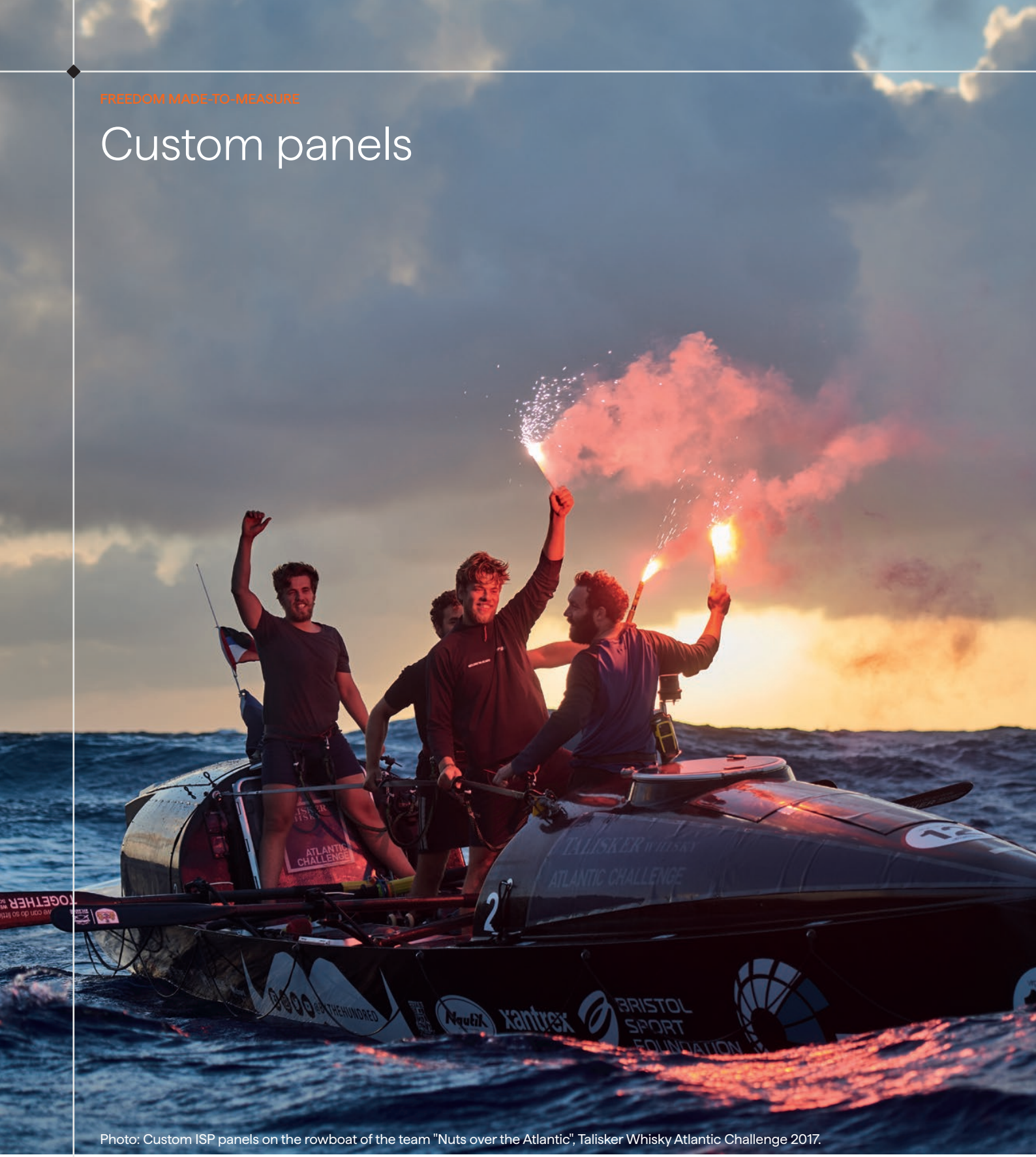
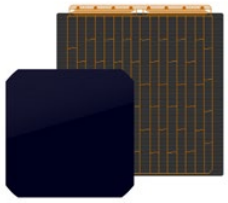


Photo: Custom ISP panels on the rowboat of the team "Nuts over the Atlantic", Talisker Whisky Atlantic Challenge 2017.

With great versatility, Solbian panels are able to meet the most demanding requirements, even in the most unusual installations. They can be mounted and removed with ease, thanks to several accessories, and adapted to various surfaces.

THE PANEL

From cell to system



Cell technology

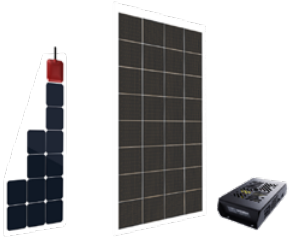
SunPower cells: high-efficiency monocrystalline silicon cells with no grid lines on the front, ensuring maximum sunlight absorption, top efficiency, and a clean aesthetic.

Merlin Solar cells: metallic front grid designed to maximize current harvesting, delivering more power and high reliability.

System solutions

Standard setup: solar panel paired with an external charge controller for maximum installation flexibility.

ALLinONE Solution 2.0: solar panel with integrated MPPT charge controller and web interface for remote monitoring, providing complete autonomy and eliminating the need for external components.





Size and shape

All our panels can have customized size and shapes to best adapt to the context for which they are intended and to make the most of the available spaces.

- Width: 150 mm - 1000 mm
- Lenght: 150 mm - 1700 mm

THE AESTHETICS

Finishes that fit your designs

Backsheet options

Black for a clean, discreet look, transparent to let underlying surfaces show through or white for maximum contrast.



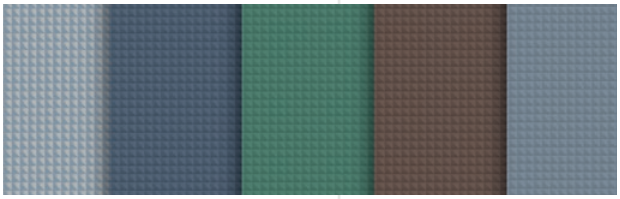


Frontsheet options

A variety of finishes, including glossy for a sleek, easy-to-clean surface, matte to reduce glare, textured for comfortable, walkable areas and antiskid for maximum grip.

ISP masking technology

It modifies the appearance of panels, enabling the integration of logos, colors, and full-surface patterns without significantly impacting performance.



THE FINAL TOUCH

Fixing options



Zip and touch fastener

Easy to install and easy to remove, zipper and VELCRO® Brand hook and loop fastener are suitable for the bimini of your boat as well as for your camping tent.

Eyelets

Solbian panels can be equipped with special stainless steel eyelets along the edge that allow easy installation with ropes or screws.

Adhesive

The fixing option with double-sided structural adhesive protects the panel from possible theft as it is irremovable.

LOXX® snap fasteners

LOXX® snap fasteners are suitable for fabric and sheets of plastic material as well as rigid structures.

Magnetic

Integrated magnetic back panel, easy to install and reposition everytime you need.

SMART INTEGRATION

Connection options

Front or rear junction box

The Junction box (JB) provides a safe and sturdy electrical connection. Solbian offers premium Junction boxes guaranteed to withstand weathering for over twenty years. The JB can be applied on the back of the panel or on its front.

Monopolar junction box

Original MC4 connectors designed to be applied on the panel surface. A solution that simplifies transport and electrical connection. Extension cables in the desired lengths and connectors are supplied.

Surface mounting

For an invisible electrical connection, two insulated wires and a specifically designed cable gland are placed on the rear of the panel, clearly showing the electrical polarity and ensuring good contact. An alternative to the Junction box, particularly suitable for the structural integration with adhesive.



Charge controllers



Solbian High-Voltage MPPT Boost Regulator

Designed for nautical and mobility sectors, this double step boost regulator is engineered to raise the voltage of a single solar module to the high levels required for electric propulsion. Supporting nominal battery voltages from 96V to 144V, it delivers a peak efficiency of > 98%.
The controller features a CAN-bus interface for seamless system integration and allows for a distributed MPPT strategy to maximize energy harvest. Encased in a compact unit (150x75×35 mm), it includes comprehensive protection against overvoltage, reverse polarity, and overtemperature.



Solbian S-Connect 10-WP

The Solbian Waterproof MPPT Connect, originally developed for the ALLinONE solution, is now available as a standalone solar charge controller. The compact, fully sealed enclosure integrates an advanced MPPT Boost/Buck architecture engineered for high efficiency and long-term reliability in marine and challenging environments.
Integrated Wi-Fi connectivity allows real-time performance monitoring and settings adjustment through a dedicated web interface.



Genasun

Genasun was founded by a group of engineers from MIT and all the charge controllers are equipped with the Maximum Power Point Tracking (MPPT) technology to reach a conversion efficiency greater than 99%. Not all MPPTs are the same, Genasun technology tracks the MPP 15 times per second to capture each single Watt from the panel. Genasun are the lighter, smaller, and most efficient solar charge controllers in the market. Buck or Boost technology, they are designed for lithium and lead-acid batteries and tested for the marine industry.



Victron

Victron Energy provides power solutions to marine, industrial, automotive, mobility, off-grid and solar markets around the world. Victron SmartSolar charge controllers enable automatic battery voltage recognition, intelligent battery management by load shedding, ultra-fast response times to solar irradiance and multi stage charging algorithms. Victron MPPTs are unique, having solar power limiting built in, which ensures the output power of a system will never exceed the maximum rating of the controller.



Western

Western CO. MPPT charge controllers have special integrated features, like: automatic detection of battery 12 V - 24 V, protection against deep battery discharge, polarity reversal, overload protection, and are suitable for both lithium batteries and lead-acid batteries.
A large display shows the operation status of the controller and all the most important electrical values which make them versatile solutions for every use.



WhisperPower

WhisperPower provides a wide range of solar charge controllers, PWM and MPPT, for any type of application.
Suntrack MPPT Solar Charge controllers are designed for charging batteries to a 12, 24, or 48 VDC. The advanced MPPT technology applied ensures a fast and complete charge, even under cloudy and fluctuating weather circumstances. The Suntrack line comes with a monitoring APP and Bluetooth connection.

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