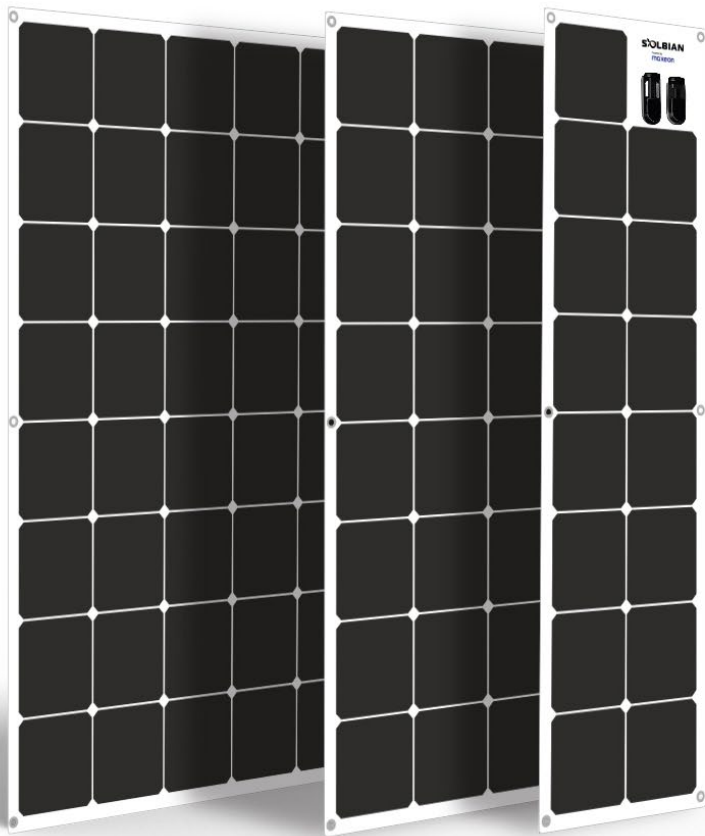




Elevate your energy independence

Harness the power of the sun!



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 semiflexible panel made with **exclusive prime SunPower Maxeon PV cells**, an MPPT Genasun charge controller, and all the necessary cables for a seamless installation.

✓ High quality made in Italy

✓ Guaranteed power with prime SunPower Maxeon PV cells

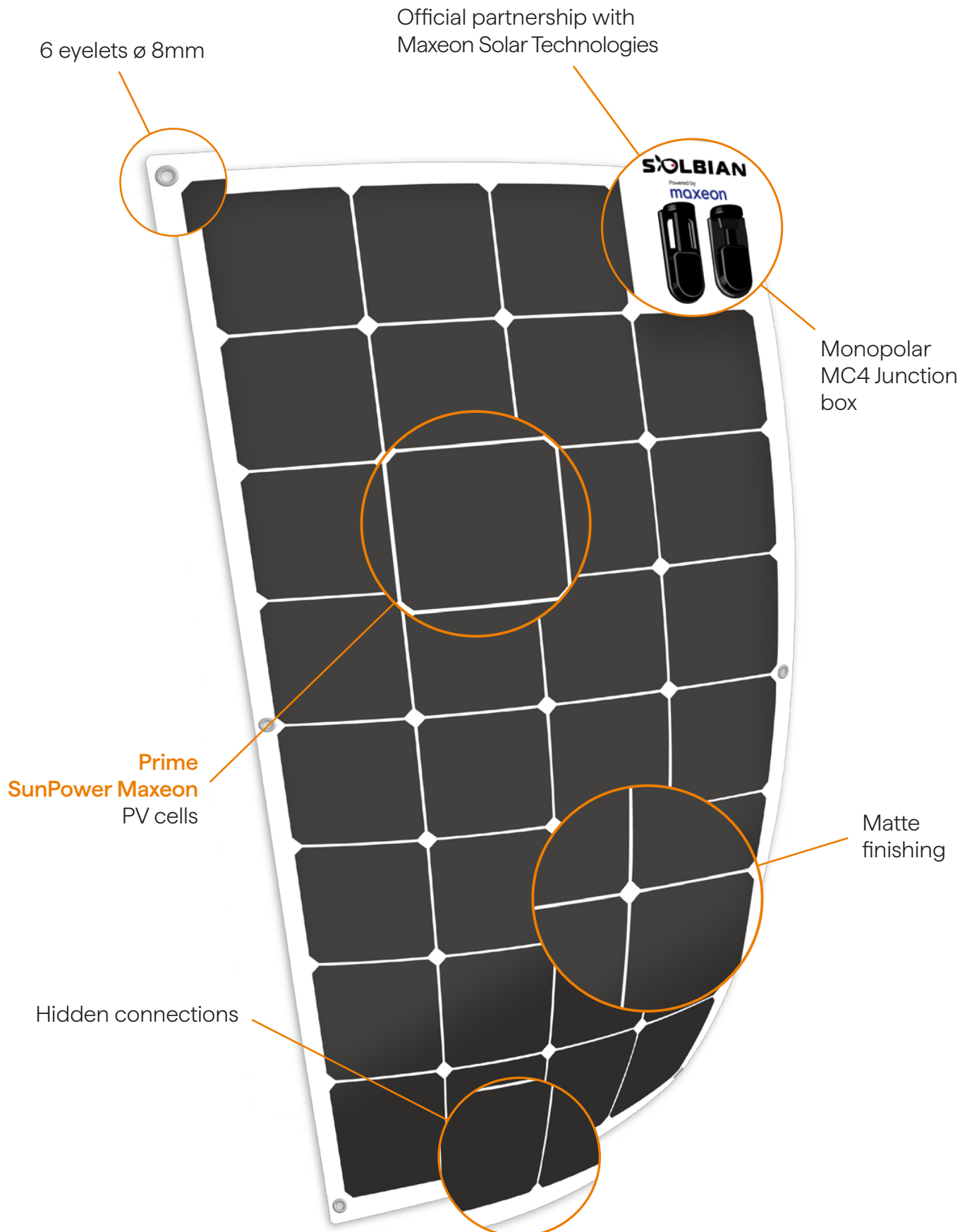
✓ Official SunPower Maxeon partner

✓ Off-the-shelf solar kit

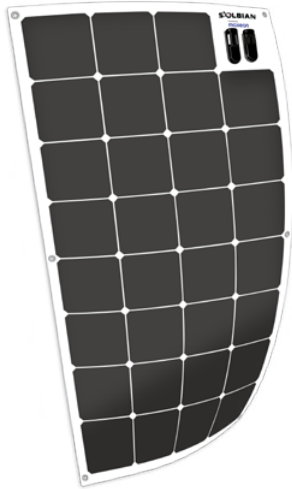
SOLBIAN

Powered by
maxeon

Highlights



Features



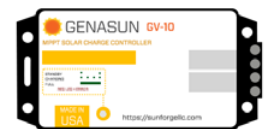
Solbian solar panel with prime SunPower Maxeon PV cells

Three different panels types make up the SunBender kit: starting with the smallest 52 Wp model, moving up to the medium 108 Wp model to the most powerful 164 Wp model. Each of them is made with exclusive SunPower Maxeon PV cells, engineered to capture every ray of sunlight, ensuring optimal power output even in challenging conditions.

Say goodbye to energy constraints and embrace a sustainable future.

State-of-the-art charge controller

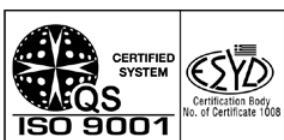
The kit includes an advanced Genasun charge controller that boasts cutting-edge features for superior energy management. This regulator is equipped with Maximum Power Point Tracking (MPPT) technology to reach a conversion efficiency greater than 99%. Not all MPPTs are the same, Genasun technology tracks the MPP 15 times per second to capture each single Watt from the panel. These controllers are also pre-programmed for the type of battery (Pb or Li) the kit is intended for and are ready for use without the need for programming or settings to be configured. Genasun are the lighter, smaller, and most efficient solar charge controllers in the market.



Easy to install with our complete set of cables

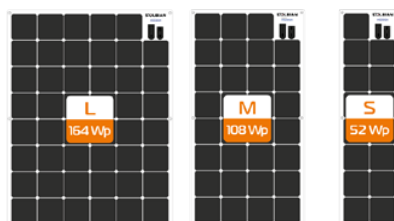
Installing our photovoltaic kit is a breeze, thanks to the included cables and user-friendly instructions. Designed for both DIY enthusiasts and professionals, the installation process is streamlined to minimize complexity and maximize efficiency. Whether you're retrofitting your existing system or embarking on a new energy project, our kit provides a hassle-free solution.

Certifications



Technical data

SOLAR PANELS



	SB 47	SB 31	SB 15
Product	Lightweight semi-flexible solar panel		
Power at STC [W] ①	164	108	52
Power tolerance [%]	± 3		
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
PV solar cells	SunPower Maxeon back contact		
PV Solar cell efficiency [%]	Min 24.4		
Bypass diodes no. ②	1	1	1
Max power voltage Vmp at STC [V] ①	29.2	19.3	9.3
Max power current Imp at STC [A] ①	5.6		
Open circuit voltage Voc at STC [V] ①	34.1	22.5	10.9
Short circuit current Isc [A]	6		
Minimum design load [Pa] ③	1600		
Operating temperature [°C]	-40 / +85		
Temp. coeff. Pmax [%/°C]	-0.27		
Temp. coeff. Voc [%/°C]	-0.24		
Temp. coeff. Isc [%/°C]	0.058		
Mounting	Ø 8 mm eyelets		
Front sheet	Matte and hidden connections		
Connection	2 x monopole JB for MC4 connectors		
Available accessories	Extension wires and through-hull fitting		
Maximum system voltage [V]	1000		
Maximum reverse current [A]	12		
Safety class	A		
Warranty [year] ④	5		

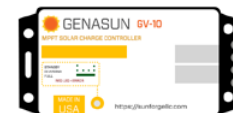
① Values at STC = Standard Test Conditions: (a) light Spectrum for an Air Mass of 1.5; (b) irradiance of 1000 W/m² with perpendicular incidence and (c) cell temperature of 25 °C. Measurements carried out according to the Standard IEC 61215 requirements.

② Diodes suitable for lamination and encapsulated within the panel.

③ Rated load for the solar panel when it is mounted on a rigid surface.

④ See the Solbian "Warranty conditions" for more information.

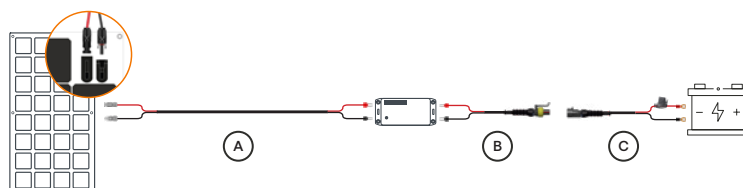
CHARGE CONTROLLERS



	Genasun			
	GVB-8		GV-10	
	Pb	Li	Pb	Li
Technology	MPPT Boost		MPPT Buck	
Max. output current [A]	8 (Input)		10.5	
Battery type	Lead Acid	4S LiFePO ₄	Lead Acid	4S LiFePO ₄
Battery voltage [V]	12-nominal			
Charge profile	Multi-Stage	CC/CV	Multi-Stage	CC/CV
Battery temp. compensation [mV/°C]	-28	disabled	-28	disabled
SunBender kit	KS		KM / KL	
Max. recommended panel power	105		140 ④	
Genasun Overdrive ⑤	-		Yes	
Environmental protection	IP 40			
Connections	4-position terminal block			
Certifications	CE, FCC, RoHS, UL, CSA			
Weight [g]	185			
Warranty [year]	5			

⑤ Genasun Overdrive - adaptive power-limiting technology, allowing the GV-10 to be installed with solar panels/arrays up to 200 W.

WIRES SET



Panel wire (A)	2 m bipolar cable, 2 x 2.5 mm ² , for outdoor use with connectors (MC4 and ferrules)
Battery wire (B)	80 cm wire, 2 x 2.5 mm ² , with connectors (ferrules and SuperSeal)
Battery wire (C)	30 cm wire, 2 x 2.5 mm ² , with inline fuse holder and connectors (SuperSeal and rings)

PACKAGING



	SunBender KL (164W)	SunBender KM (108W)	SunBender KS (52W)
Weight [kg]	5.5	4.5	3.5
Dimensions [mm]	1085x915	1085x660	1085x660