

Elevate Your Energy Independence

Harness the Power of the Sun!



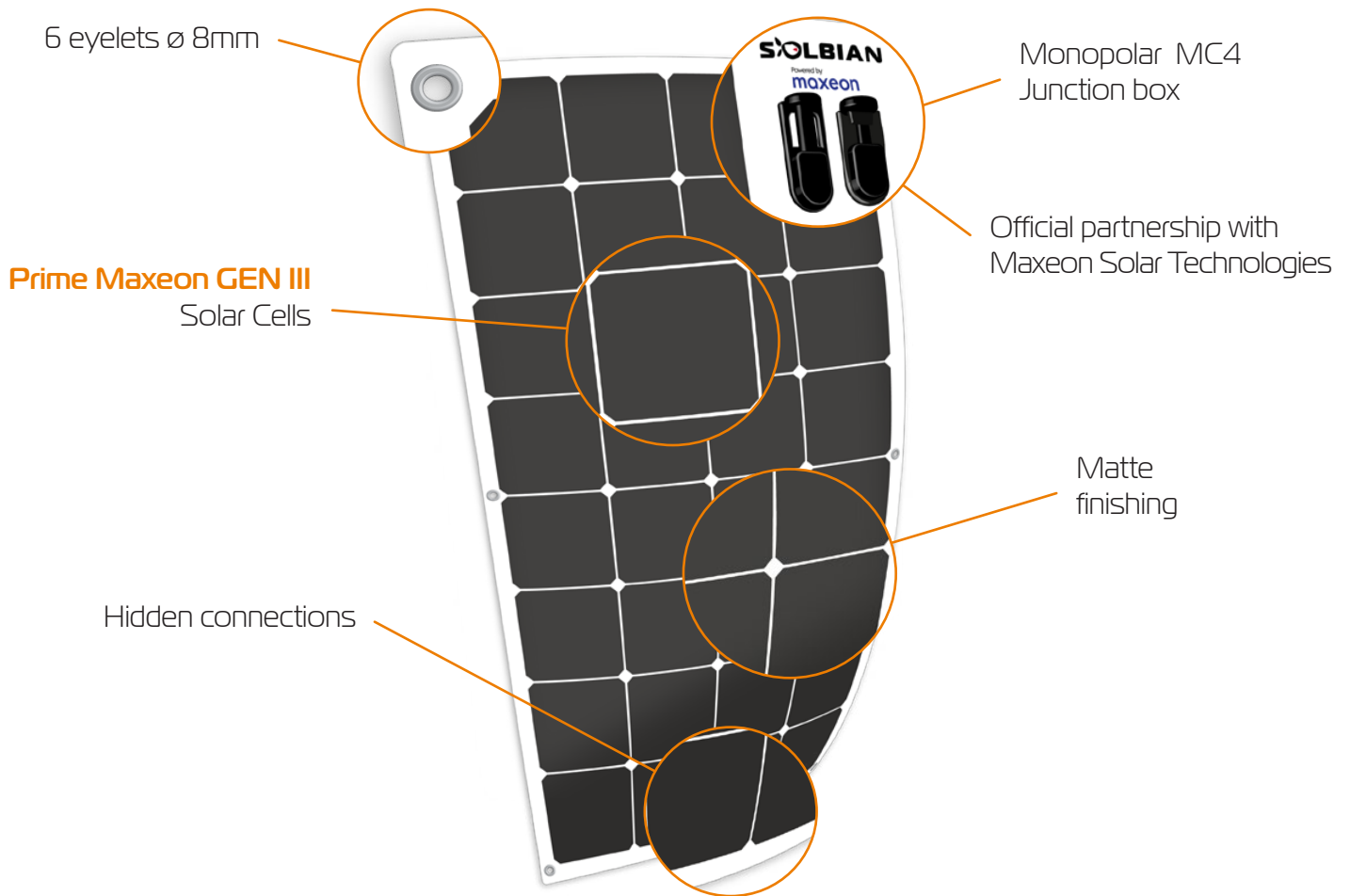
Experience the future of energy with our state-of-the-art photovoltaic kit, meticulously crafted to meet all your power needs.

The SunBender Solar Kit includes a Solbian solar panel made with **exclusive Gen III Maxeon solar cells**, an MPPT Genasun charge controller, and all the necessary cables for a seamless installation.

- ✓ High quality made in Italy
- ✓ Official Maxeon partner

- ✓ Guaranteed power with Maxeon Prime PV cells
- ✓ Off-the-shelf solar kit

Highlights

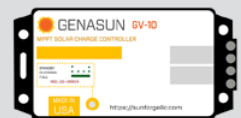


Solbian Solar Panel with Maxeon Gen III Solar Cells

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 Maxeon Gen III solar 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.

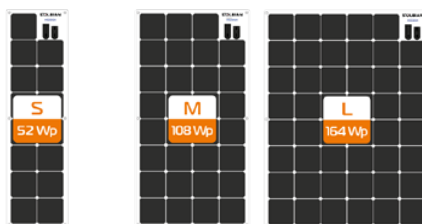


Easy to Install with Our Complete Set of Cables

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.

Technical data

SOLAR PANELS



	SB 15	SB 31	SB 47
Maximum Power at STC ⁽¹⁾	52 W	108 W	164 W
Power Tolerance	± 3 %		
Length Y	1054 mm		
Width X	292 mm	546 mm	800 mm
Thickness	2 mm		
Weight	0.7 kg	1.4 kg	2 kg
PV Cells	Premium Moxeon Gen III solar cells (Me3 type)		
PV Cell Efficiency	Min 24.0% - Max. 24.4%		
Max Power Voltage Vmp at STC ⁽¹⁾	9.2 V	19 V	28.8 V
Max Power Current Imp at STC ⁽¹⁾	5.7 A		
Open Circuit Voltage Voc at STC ⁽¹⁾	10,9 V	22,5 V	34,1 V
Short Circuit Current Isc	6 A		
Operating Temperature	-40/+85 °C		
Temp. Coeff. Pmax	-0.27 %/°C		
Temp. Coeff. Voc	-0.236 %/°C		
Temp. Coeff. Isc	0.058 %/°C		
Mounting	6 eyelets Ø 8 mm		
Connection	2 x Monopole JB for MC4 connectors		
Front Sheet / Style	Matte and hidden connections		
Columns x Rows (cells n°)	2x8 (15)	4x8 (31)	6x8 (47)
Maximum System Voltage	1000 V		
Maximum Reverse Current	12 A		
Safety Class	A		
Warranty ⁽²⁾	5 years		

(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) See "Solbian Warranty Policy" for additional information

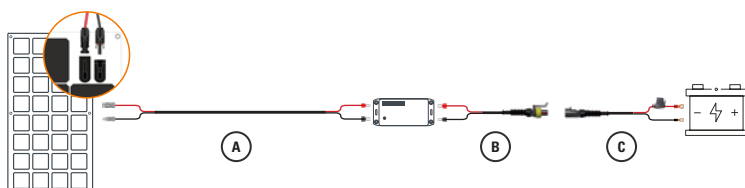
CHARGE CONTROLLERS



	Genasun			
	GVB-8		GV-10	
	Pb-12V	Li-14.2V	Pb-12V	Li-14.2V
Type	MPPT	MPPT	MPPT	MPPT
Battery Type	Lead Acid	4S LiFePO ₄	Lead Acid	4S LiFePO ₄
Battery Voltage	12V-nominal	12V-nominal	12V-nominal	12V-nominal
Charge Profile	Multi-Stage	CC/CV	Multi-Stage	CC/CV
Battery Temp. Compensation	-28 mV/°C	disabled	-28 mV/°C	disabled
SunBender Panel	SB15		SB31 - SB47	
Technology	Boost (Step-up)		Buck (Step-down)	
MAX Recommended Panel Power	105 W		140 ⁽³⁾ W	
Genasun Overdrive ⁽³⁾	-		Yes	
Environmental Protection	IP 40		IP 40	
Connections	4-position terminal block		4-position terminal block	
Certifications	CE, FCC, RoHS, UL, CSA		CE, FCC, RoHS, UL, CSA	
Weight	185 g		185 g	
Warranty	5 years			

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

WIRES SET



	Kit Cable Specifications
Cable A	2 m, 2 x 2.5mq (red/black) with MC4 and ferrules connectors
Cable B	80 cm, 2 x 2.5mq (red/black) with ferrules and SuperSeal connector
Cable C	30 cm, 2 x 2.5mq (red/black) with inline fuse holder and ring connectors

PACKAGING



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