IBS Intelligent Battery System GmbH

Seestrasse 24, CH-3600 Thun, Schweiz

Tel: +41 33 221 06 16 Web: www.ibs-tech.ch E-Mail: info@ibs-tech.ch





Solar kit SK110+ (SK220+)

Portable, flexible, light

Manual



Language / Sprache / Langue / Lingua

For manual in another language follow the path or scan QR-Code. Für Handbücher in einer anderen Sprache, Links folgen oder QR-Code scannen. Pour les manuels dans une autre langue suivez le link ou scannez le code QR. Per il manuale in una otra lingua seguite il link o scannerizzate il codice QR.

English Deutsch Français Italiano

http://www.ibs-tech.ch/download/manuals-ibs.html dieser Bereich ist unter Vorbereitung

Product description

The foldable IBS solar panels with feet Kit SK110+ / SK220+ in heterojunction (HJT) technology are suitable for mobile use such as camping and off-road vehicles as well as for use on boats or alpine cones. The solar kit should be orientated as directly as possible towards the sun. With the help of the "Victron Connect APP" for the solar controller, the output can be optimised by pointing the solar cell towards the sun. Thanks to the MPPT solar controller, the solar yield increases by approx. 20% per day

SK240+ is the solar kit with two SK110 solar panels in parallel for double the output.

For the combination with the IBS-DBM20AS, the dual battery management system with 150W solar input, the solar kit SK110- with 10m cable but without solar controller is used, as this is already part of the IBS-DBM20AS. (Please refer to the DBM20AS installation instructions) See accessories on the last page.

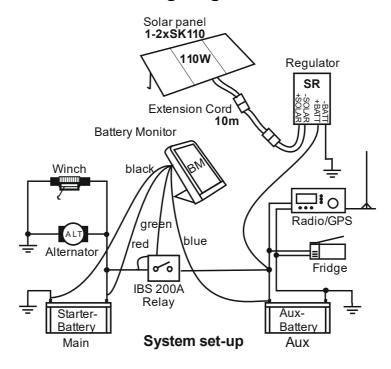
If the SK120+ or SK240+ is connected to the additional battery in an IBS-DBS dual battery system, the starter battery is also charged if there is sufficient solar power.

Important when using SK110+ / SK220+

- Align the solar cell as well as possible (i.e. at right angles) to the sun and avoid covering it with objects, bushes or vehicles.
- If the solar panel tracks the sun throughout the day, the yield increases.
- The Victron BlueSmart solar controller is lithium battery compatible.
- Clean the solar panel with a damp, soft cloth if it is dusty or dirty.
- Über die Montageösen kann das Solarpanel bei Wind fixiert werden.
- The solar panel can be secured against theft with a steel cable and lock using the mounting eyelets.
- The solar panel is not designed to be mounted on the vehicle roof while driving, there are other suitable IBS solar panels SKK118/SKK197/SKK204 for this purpose.
- When transporting/stowing, ensure that the solar panel is protected against rubbing or moving parts.
- The load output of the Victron solar controller can be used to operate small consumers up to the maximum current of the solar controller 10A or 15A, such as a refrigerator or LED light, and the battery is thus protected by the deep discharge protection function.



Wiring diagram



Warning

- Do not fold the SK110+ / SK220+ solar cells outside the designated standard folding zones.
- Do not stand on the SK110+ / SK220+ solar cells when they are folded up.
- The solar cells must not be installed under or near power lines.
- Do not stand, walk or drive over the SK110+ / SK220+ solar cells.
- Do not attempt to modify or tamper with the wiring, devices and connections.
- Do not pull on the cable.
- Always observe the correct polarity: red (+) positive; black (-) negative.
- Always use the solar controller with the correct output: Victron BlueSmart 75/10 or 15A.
- The Solar Kit SK110+ / SK220+ described here is only suitable for 12VDC systems. Please contact IBS GmbH or your local dealer if you wish to operate a 24, 36 or 48 VDC system.
- Failure to observe the above points will invalidate the 2-year guarantee.

Features of the SK110+ / SK220+ solar cells

- Foldable, flexible solar panel with eyelets on each side for secure fastening.
- Extension ready to conveniently add additional solar panels if necessary. Simple installation. "Plug-and-play principle".
- More power in low light (cloudy) thanks to Heterojunction (HJT) technology.
- delivers up to 20% more energy to the battery thanks to Heterojunction (HJT) technology in combination with MPPT (Maximum Power Point Technology) from the solar controller.
- Solar cell is waterproof, hail-resistant and dustproof.



Delivery contents Kit 110W and 220W

Foldable solar cell	SK110+ (110W)	SK220+ (220W)
Foldable glass-free solar panel with cable	1x	2x
connection and 25A Anderson plug grey		
Solar regulator Victron with Bluetooth	1x 75V/10A, 12V	1x 75V/15A, 12V (24V)
Bluetooth APP [V, A, Ah, History]	Victron Connect APP	Victron Connect APP
Special cable with twin plug 2x4mm2 with 25A	1x 10m cable	2x 10m cable
Anderson plug grey, connections for connecting the		
solar panel to the controller		
Manual	1x	1x

Specifications

IBS order number:	SK110+	SK220+
Technology	Heterojunction	Heterojunction
Pmax, maximum power	110W	220W
Imp, current at max. power of the solar cell	4.48A	8.96A
Vmp, voltage at max. power of the solar cell	24.4V	24.4V
Weight of the solar cell	2.4 kg	2x 2.4 kg
Battery charge current (with Victron MPPT solar regulator)	6.7A	13.4A
Dimensions laid out I x w x h	200x40x2cm	2 x 200x40x2cm
Dimensions folded I x w x h	40x36x3.5cm	2 x 40x36x3.5cm cm
Solar regulator Victron with Bluetooth	75V/10A	75V/15A
Specifikationen Solar regulator maximum charge current	10A	15A
Max. Working temperature	85°C	85°C

Accessories

IBS-DBS/12V-EM	IBS Dual battery system
IBS-DBM20AS	IBS DBM20AS Dual battery management with DC/DC charging/solar input
DBM20AS-SCK	DBM Solar connection kit when using SK120-

IBS-DBS/12V-EM



DBM20AS-SCK







IBS-SK110 Manual Stand 3.2.2024 Manual Version 1.0.0



Händler:

