



CRAFTSTROM
SOLAR

USER GUIDE

THE CRAFTSTROM INVERTER/SOLARPANEL KIT



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OVERVIEW

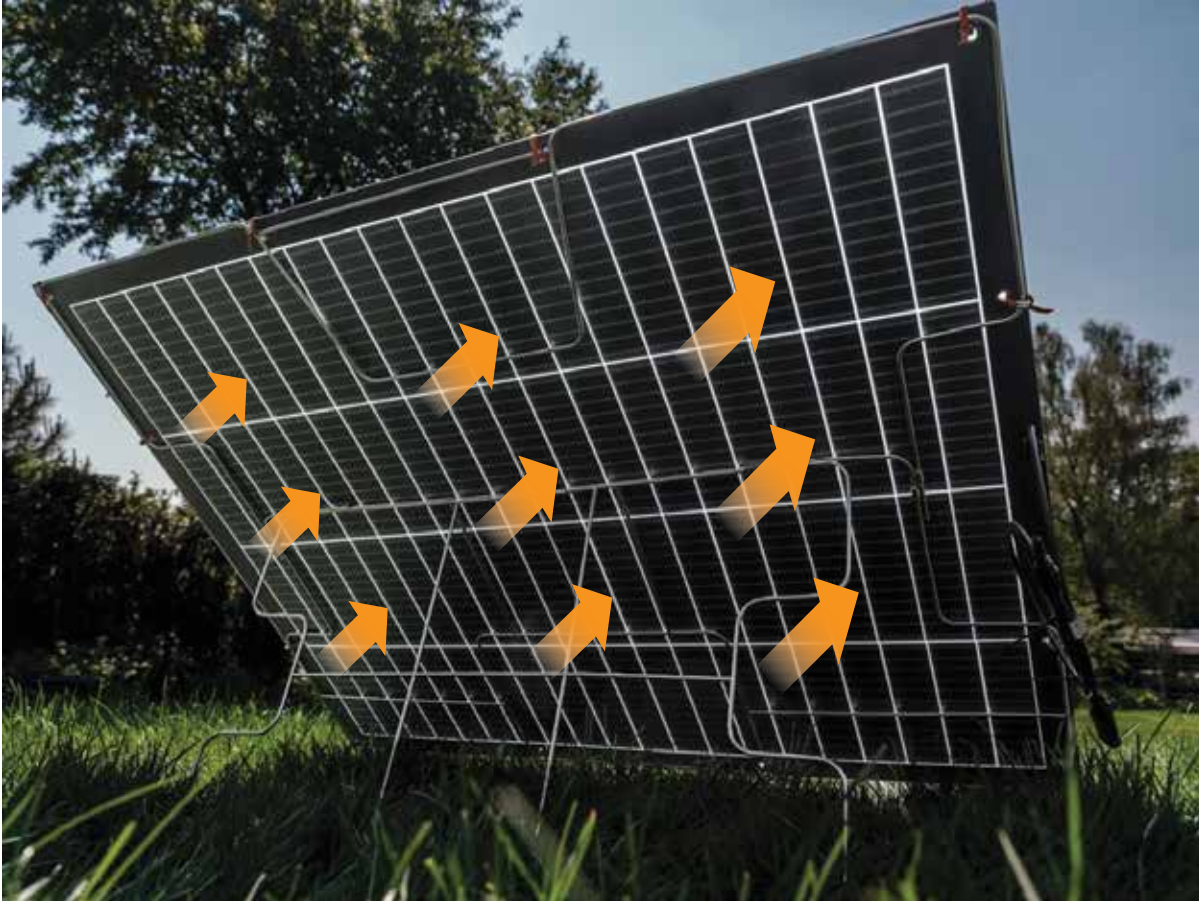
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SMART INVERTER - CARE AND SAFETY GUIDE

CONGRATULATIONS!

Hi and Welcome to the easiest solar setup in the world. Please follow these instructions diligently to ensure proper working order and safety. The CraftStrom solar inverter is the only solar inverter that features both WiFi and sub-GHz communication. While the WiFi function allows you to communicate with the inverter and gather data in your CraftStrom App, sub-GHz communication is used by our products to create their own network, independent of your home WiFi. Should your WiFi ever fail, you can be sure that our products will keep working faithfully on their own. This, however, means you won't be able to check on your system during a WiFi outage.

SEMI-FLEXIBLE BIFACIAL SOLAR PANEL



Semi -Flexible & Transparent Bifacial Solar Panels (36V)

Max Power Front	200W
Max Power Back	170W
Max Power Voltage	36.48V
Open-circuit Voltage	42.88V
Max Power Current	5.49A
Cell Efficiency	23.5%
Protective Layer	ETFE
Max System Voltage	DC1000V
Dimensions	1170 x 923 x 3.8mm
Weight	4.2 KG
Working Temperature	-40°C +80°C

WARNING

This module produces electricity when exposed to light. Follow all applicable electrical safety precautions!
 -ONLY qualified personell should install or perform maintenance work on these modules.
 -Be Aware of dangerous high DC voltage wne connecting modules.
 -Do NOT damage or scratch the rear surface of the module.
 -FOLLOW the battery manufacturers recommendations if batteries are used with modules.
 Refer to instruction manual for more info.

Test standard: IEC61215 AM1.5 25°C 1000W/m²



Semi -Flexible & Transparent Bifacial Solar Panels (24V)

Max Power Front	200W
Max Power Back	170W
Max Power Voltage	23.2V
Open-circuit Voltage	27.5V
Max Power Current	8.63A
Cell Efficiency	23.5%
Protective Layer	ETFE
Max System Voltage	DC1000V
Dimensions	1170 x 923 x 3.8mm
Weight	4.2 KG
Working Temperature	-40°C +80°C

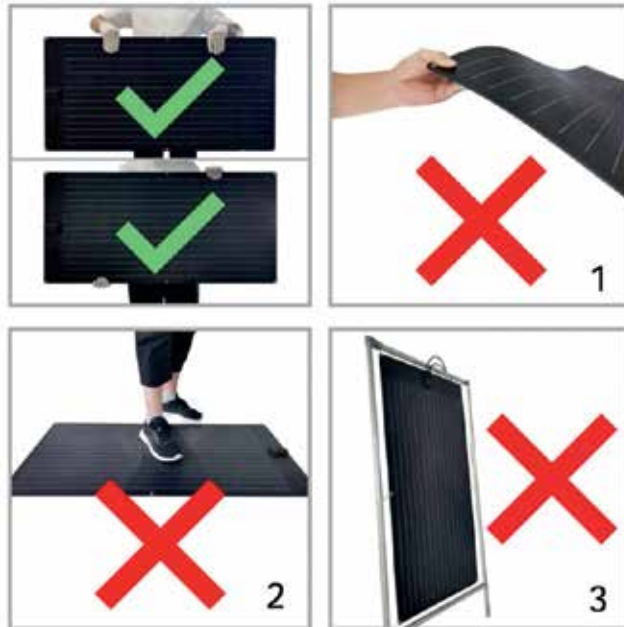
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Test standard: IEC61215 AM1.5 25°C 1000W/m²



SEMI-FLEXIBLE BIFACIAL SOLAR PANEL



Setup

1. Plug one module into one of the two thin pairs of cables on the sides of the inverter. The plugs only fit together in the correct pairing. It will click when it snaps into place. (Some plugs/sockets of solar modules or PV extensions require a relatively large amount of force when plugged into the inverter. Nevertheless, make sure you have the correct connection and the click mentioned above.)
2. Connect the connection cable with the AC cable.
3. You're done by plugging the AC cable into the Outdoor outlet!

Attention: Do not use the outer socket in your outdoor outlet to power anything else!

MAINTENANCE

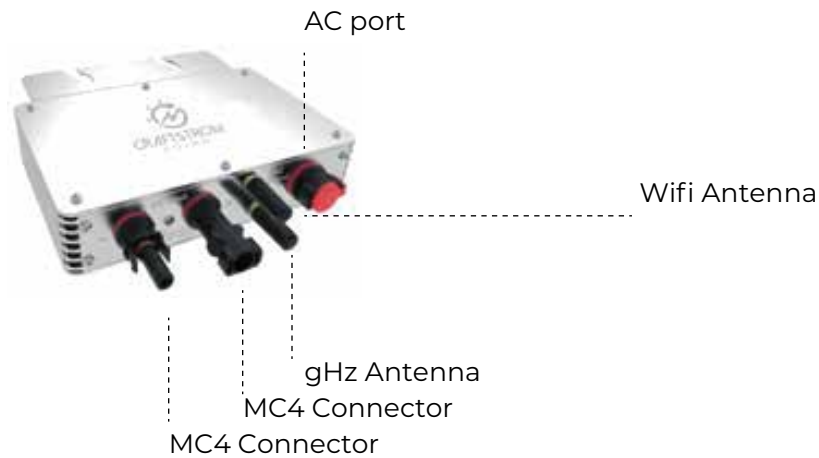
- When it snows, you free the modules from heavy snow loads.
- Wash the modules regularly with weak soap to remove any remaining dirt from the ETFE.
- Do not use brushes to protect the ETFE from scratches.
- Also regularly check all cable connections for cracks, animal damage, etc. to prevent short circuits.

ATTENTION

1. A small area of distortion of solar panels can easily lead to broken internal chips.
2. Avoid stepping on or hitting the panel to cause excessive pressure damage.
3. When installing the solar panel, you should make sure that it is not mounted freely, as in the picture. It needs stabilization at the back to avoid damage from excessive crosswinds.
4. Use 3M Very High Bond dual sided tape to glue down the panels as well.

INVERTER & FUNCTION

Appearance and Connectors

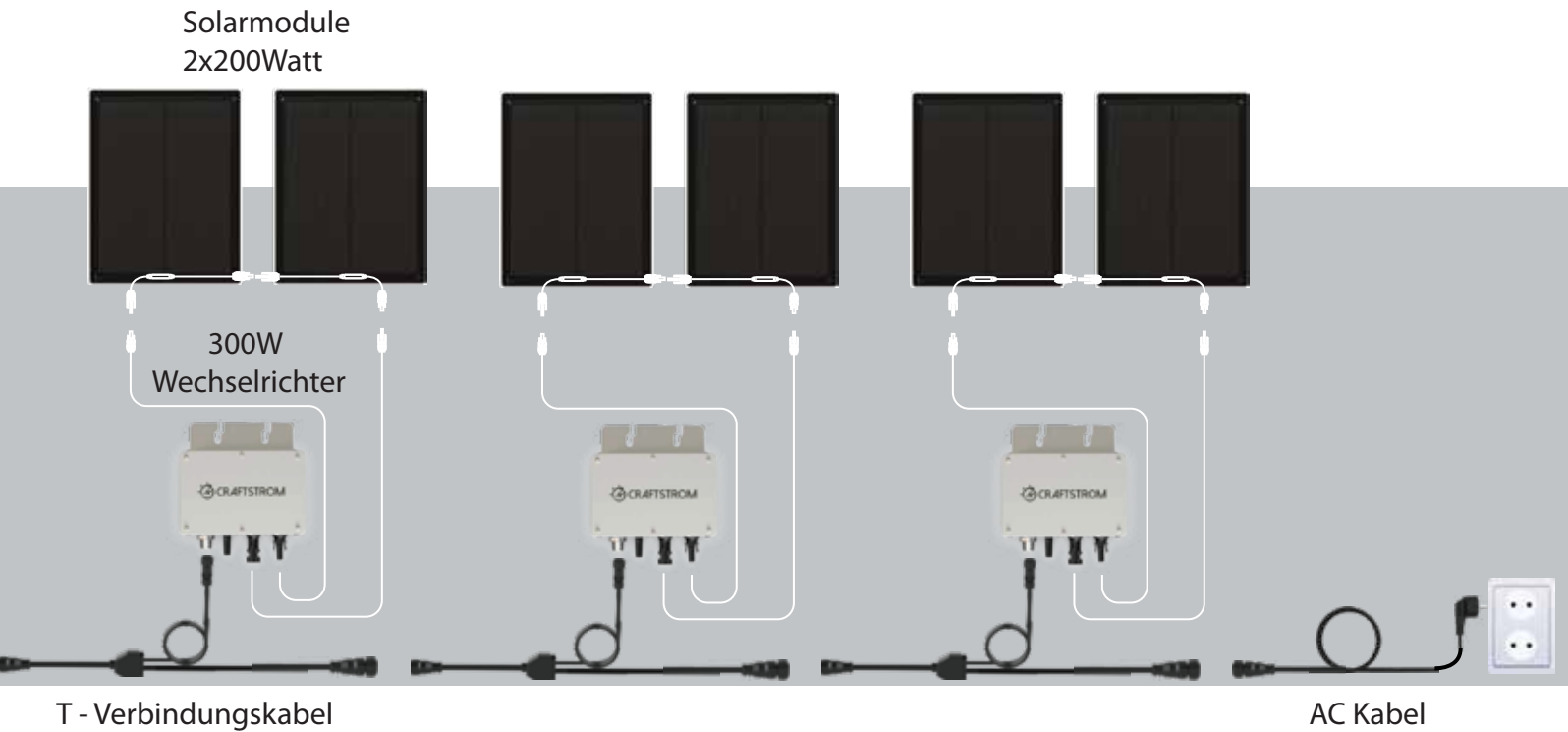


1. Unpack solar panels, being careful not to bend beyond 30°.
2. Mount the solar panels using all eyelets. Improper installation will void the guarantee.
3. Unpack solar inverter and attach both antennas. Make sure to mount both antennas. WiFi and sub-GHz communication.
4. Connect the AC cable to the Inverter and Plug it into the standard outdoor outlet
5. Mount the solar inverter in a shaded and & dry environment (see picture below). Ensure airflow around the inverter. The housing of the inverter is the heat sink. Be careful never to touch the inverter during operation, as it can get very hot. This is normal.



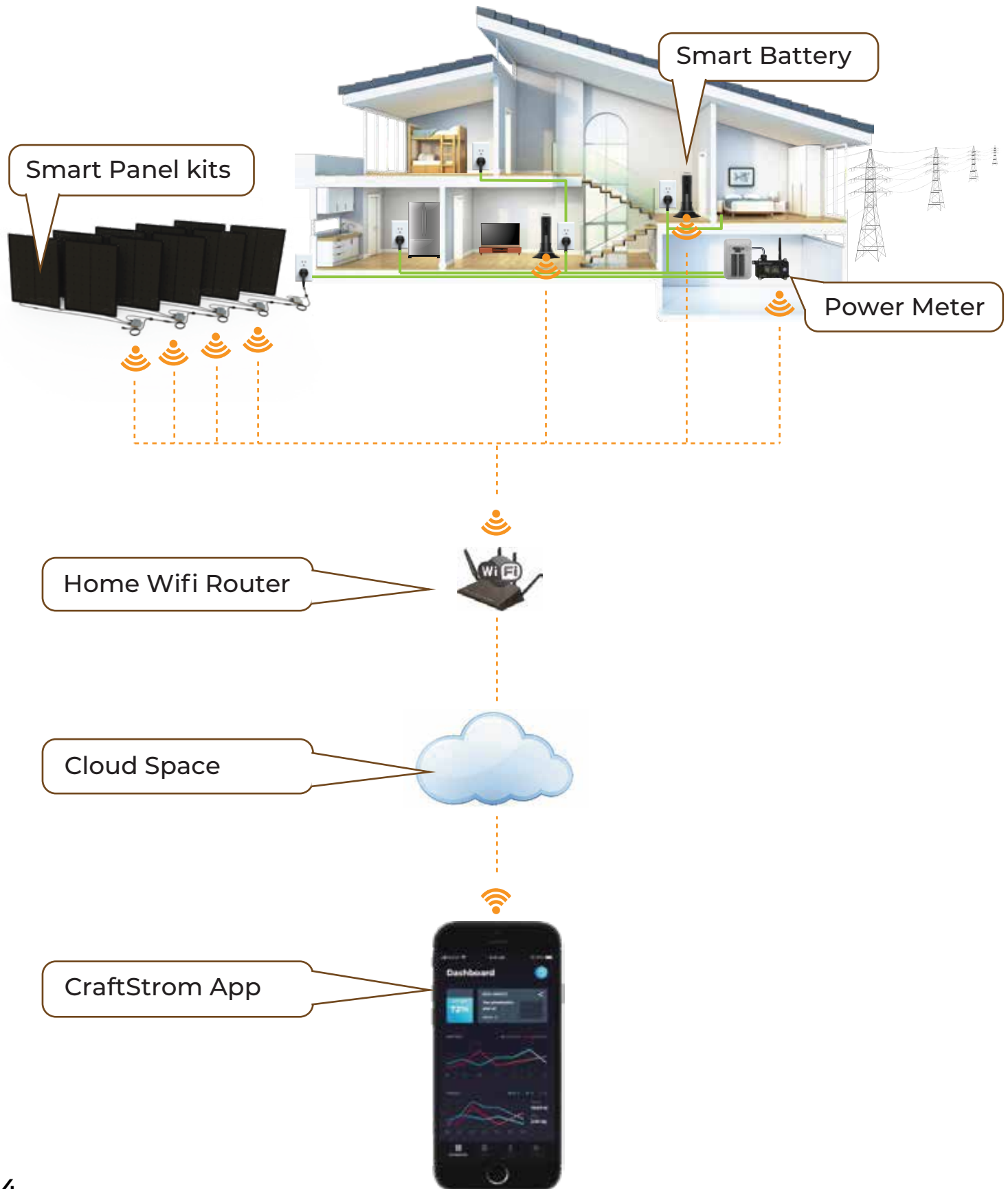
MODE OF CONNECTION

5.1 Direct Access (rated max. Current < 100A)



1. Connect the 2 panels to each other & Connect the two MC4 cable plugs to the inverter.2. Mount the solar panels using all eyelets. Improper installation will void the guarantee.
2. If you have more than one inverter mounted, use the AC to AC connector cables (pic) to connect all inverters (max 10) in parallel.
3. Attach the M25 AC cable to the last inverter connector cable. This means that you will have one open-ended connector cable. Make sure it is safe from water ingress.
4. If your outdoor outlet is not on a designated circuit please connect the AC end cable to our Safety Gate Adapter (SGA) and plug the SGA into a power outlet.
5. 10. Congratulations, you're done installing the hardware.

POWER FLOW & COMMUNICATION



MAIN TECHNICAL DATA

Model	Hedy		
Maximum input power	350 Watt		
Output voltage mode	120/230V auto switch		
PV open circuit voltage	60 - 100 VOC		
Operating voltage range	55 - 100 V		
MPPT range DC	65 - 100 V		
short circuit current	7A		
maximum working current	6.3A		
Output parameters	@120V	@230V	@240V
Output peak power	350 Watt	300Watt	350watt
Rated output power	350 Watt	300Watt	350watt
Output current	2.91 A	1.14A	1.52A
AC voltage range	80-160VAC	180-280VAC	180-280VAC
AC frequency range	48-51 Hz/58-61 Hz	48-51 Hz/58-61 Hz	48-51 Hz/58-61 Hz
Power factor	>95%	>95%	>95%
Number of branch connections	30 pcs (single)	30 pcs (single)	30 pcs (single)
Output efficiency	@120V	@230V	@240V
Static MPPT efficiency	99.5%	99.5%	99.5%
Max output efficiency	99%	99%	99%
Loss of power at night	<0.5W	<0.5W	<0.5W
Total current harmonics	5%	5%	5%
Appearance and technical features			
Temperature range	- 20°C to + 50°C		
Dimensions(LxWxH)	165mm x 176mm x 38mm		
Net weight	0.82kg		
Enclosure rating	NEMA3R		
Heat dissipation mode	Self-cooling		
Communication mode	Wifi		
Powertransmission mode	Reverse transmission, Load priority		
Monitoring system	Mobile phone App, Browser		
Electromagnetic compatibility	EN 5008.1 Part1 EN 5008.2 Part1 CSAS TD.C22.2.No.107.1		
Power grid	EN 61000-3-2 EN 62109 UL STD 1741		
Power grid detection	DIN VDE 4105, IEEE STD 1547 1547.1 and 1547.A		
Certification	FCC,CE, ETL		
Packing Weight			
Specifications	Each (Packaging)	Box(15Pcs)	
Weight	1.28kg	19.2kg	
Size	245 x 202 x 60 mm	450 x 395 x 345 mm	

DOWNLOAD THE CRAFTSTROM APP

Download Craftstrom App and Set Up Devices

The CraftStrom app is free and allows you to monitor your devices

& management of production vs. storage. But the app can do so much more...

Monitor devices and your success. Check your monthly electricity

bill – simply compare the readings of our electricity meters in “kWh”.

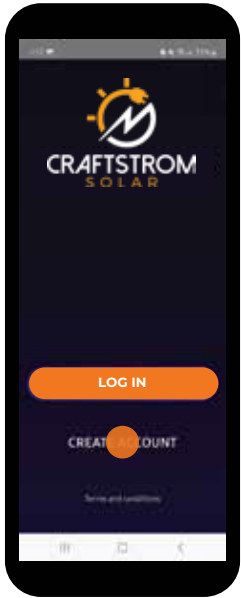
“kWh” stated on the electricity bill. Share your success with yours

Friends on Social Media See how your efforts are helping the environment.

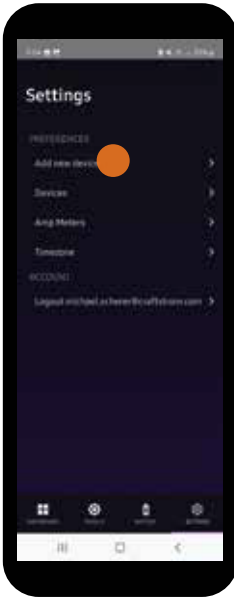


CRAFTSTROM APP AND SET UP DEVICES

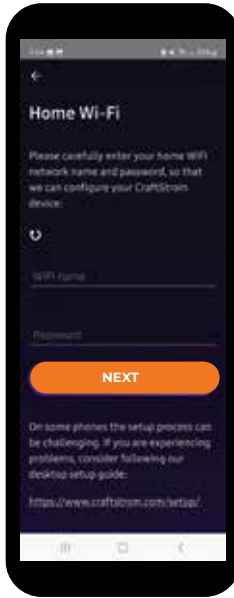
Step1
Create username and Password



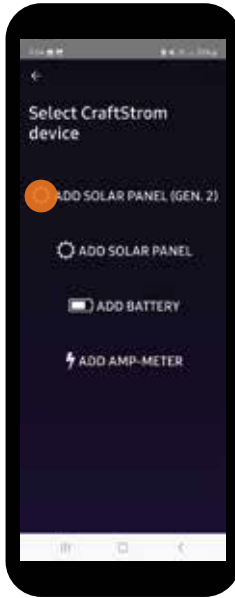
Step2
Go to add new device



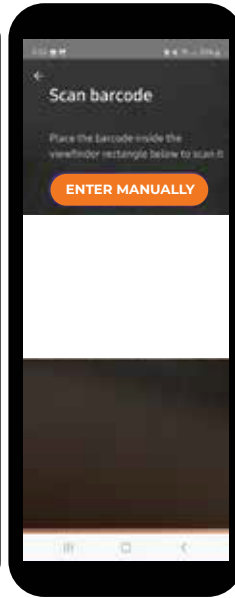
Step3
Pick your home wifi and enter Password



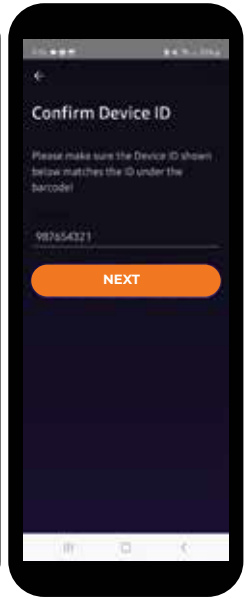
Step4
Pick Add Solar Panel (Gen 2 if you purchased in 2023)



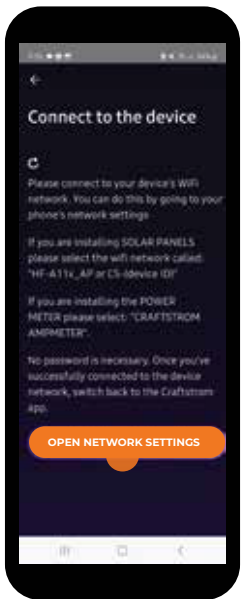
Step5
Scan barcode or enter ID manually



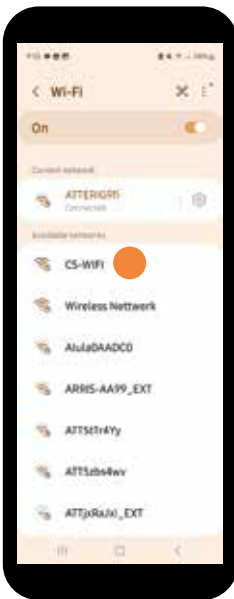
Step6
Confirm ID



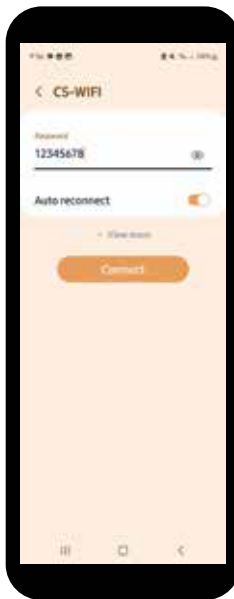
Step7
Open Network setting by pressing button below



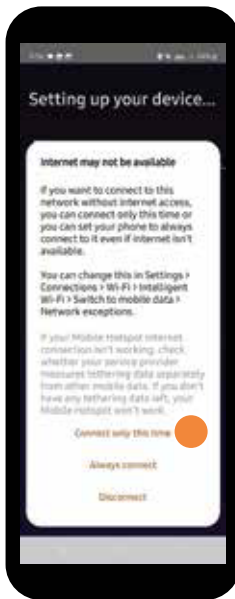
Step8
Pick CS-Wifi



Step9
Enter Password: 12345678



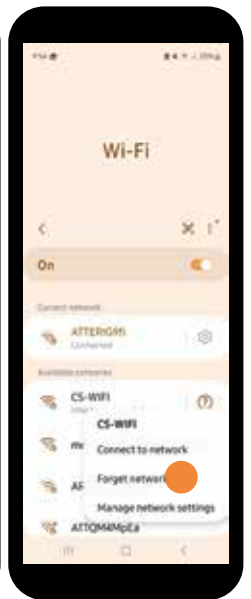
Step10
On Android allow to connect only this time



Step11
Success! Your Inverter is being setup! Give it a moment to populate



Step12
If you are installing other Inverters go to network settings and tell it to forget network! Repeat Install with new Inverter



After the success message in your App please press and hold the reset button on your Inverter for 1 second!

If the Inverter does not show up on the panles page, then go back to Settings - Devices delete the ID number and repeat the installation - remember to forget network (CS WIFI) in network settings before you reinstall! To reset wifi module on Inverter - press silver button next to antennas for 1 second...