Your solar set in just 8 easy steps

Installation manual

we do solar

Before we start...

Check your location

Find the area with the most and long-lasting sun exposure.

Check where the power socket is.

Look for possible options to attach the panels with the fastening straps included in the set (short and long).

If you are not yet sure whether your fence offers the necessary conditions, visit our website to carry out a short self-assessment (4 steps).

To Self-Assessment

Approval

You don't have to! You can simply install your We Do Solar system on your fence. As long as you do not change anything on the facade, you usually do not need permission from the landlord or the owners' association. However, it may be that the owners' association has some specifications, we therefore recommend that you clarify this briefly.

Check the power supply

Your We Do Solar system is easily connected with a normal power plug. This is a standard plug with which every household appliance is equipped. It conducts the current of the solar system into any conventional socket. No electrician is needed!

Safety instructions

Please read these instructions carefully before starting the assembly work. Damage caused by improper handling will void any liability and warranty claims. Keep the assembly instructions for future reference.

This manual describes the installation and operation of your We Do Solar solar privacy screen. It feeds the self-generated energy of up to 600W into the circuit of the connected household grid.

The system is not intended to be used by persons (including children) with reduced physical, sensory or mental capabilities, or lack of experience and/or knowledge, unless they have been given supervision or instruction concerning use of the equipment by a person responsible for their safety.

Children must be supervised to ensure that they do not play with the device.

The components have been produced with high quality and safety requirements in mind. However, WeDoSolar GmbH's warranty and liability do not cover personal injury or damage to property resulting, for example, from one or more of the following causes:

- Non-observance of these mounting instructions
- Improper assembly, commissioning, maintenance and operation
- Improperly performed repairs and transports
- Unauthorized structural changes to the system kit
- All damage caused by continued use of the system kit, despite an obvious defect
- Non-use of original spare parts and original accessories
- Non-intended use of the system kit
- Force majeure

Safe and proper operation of the device requires proper transport, storage, installation, assembly and operation. Before installation, check all components for any transport or handling damage. If there is any external damage, do not connect the solar sight screen.

When installing and operating the solar visual protector, the national legal regulations and the connection conditions of the grid operator must be observed. In particular, DIN VDE V 0100-551-1 (VDE V 0100-551-1), VDE AR-N 4105:2018-11, DIN VDE 0100-712, DIN VDE 0100-410 and DIN VDE V 0628-1 (VDE V 0628-1).

Safety instructions

Note that for safe operation of the circuit, a residual current device (RCD) with 30mA must be installed in accordance with DIN VDE 0100-410 (VDE 0100-410). Please note that the solar privacy screen generates direct current when there is sufficient sunlight, which causes the solar privacy screen to be live. Please do not disconnect the cables when the system is live. Always disconnect the power plug first.

Avoid touching the inverter under load, as the surface is hot and burns may occur.

The cables must not be under high tensile stress or permanently exposed to liquids. There must be no open plug connections during operation.

In general, solar systems are considered to require very little maintenance. The solar inverter contains no moving parts that require maintenance. The inverter housing must not be opened and may result in electric shock or death if opened. In case of any abnormality or irregularity, disconnect the power plug and do not continue to use the unit. Do not carry out any independent repairs or modifications to the solar view screen or other parts of the system. Repairs and maintenance may only be carried out by qualified personnel. However, carry out a visual inspection at least once a year and check the solar-powered visual protector and the inverter for defects.

Make sure that no personal injury can occur due to parts falling from the plant. We Do Solar GmbH does not assume any liability for the proper installation of the system and its mounting, especially if it is installed in or above the public area.

Do not install the solar screen in strong wind or rain. Always install the kit in pairs, with one person holding the panel while the other person mounts it with the mounting hardware. Do not release the panel until the panel is secured with at least two straps.

At the end of the module's life you are welcome to send them back to us so we can refurbish the panels and donate them to countries lacking energy resources. Please contact our customer service for further details.

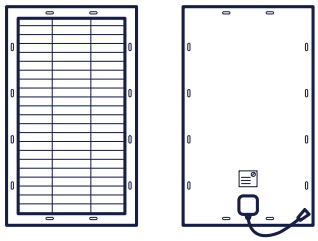
Make sure that your electricity meter cannot turn backwards when feeding into the grid and contact our support if you want us to register your solar system in accordance with all existing guidelines.

Note the information on the determination of the line reserve in the appendix.

Nächster Schritt
Montage

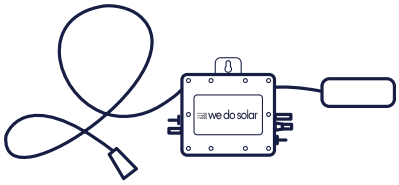
Your We Do Solar set consists of:

x8



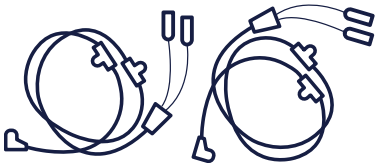
Solar panels

x1



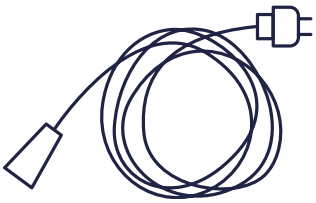
Microinverter

x2



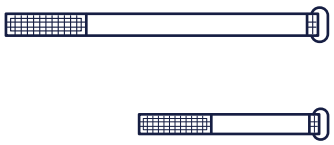
Connecting Cables

x1



Power plug cable

x32 x32



Long and short straps

x10

Straps for cables

Please note

The small cable straps are not suitable for fastening the panels. Please use them exclusively for organising the cable strings, if necessary and desired.

Do not push with your fingers or other objects against the areas in front and behind the solar cells! Make sure to only touch the border of the panels during mounting.

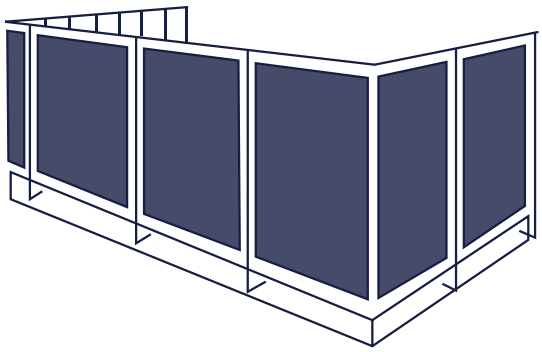
Do not bend the panels!

Next step
Get an overview

01/08
Get an overview

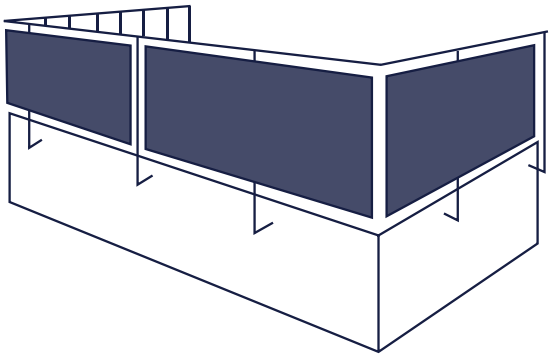
Check the space you currently have for mounting the individual panel components. In the assembled state, it should later look like this:

Option 1



Vertical mounting

Option 2



Horizontal mounting

Please note

Since there are two ways of mounting your solar panels, take a look at the drawings to see which mounting would fit your fence better to then start the installation.

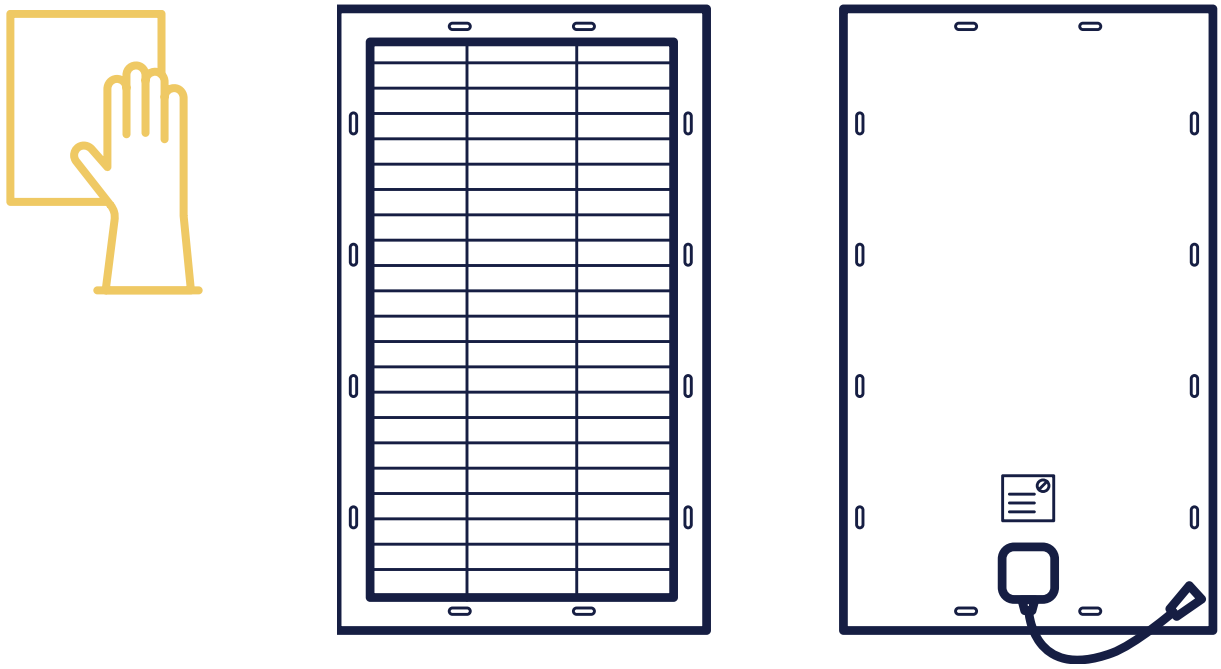
Maximum mounting height

Wind zone	1	2	3	4 (Nord Sea Islands)	4 (Other)
Maximum height	300m	162m	42m	16m	25m

Next step
Remove dust from panels

02/08
Remove dust from panels

Use a damp cloth to wipe the solar panels.

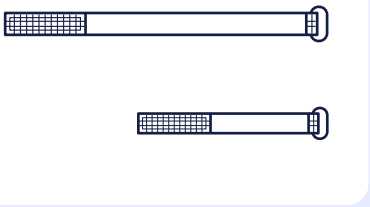


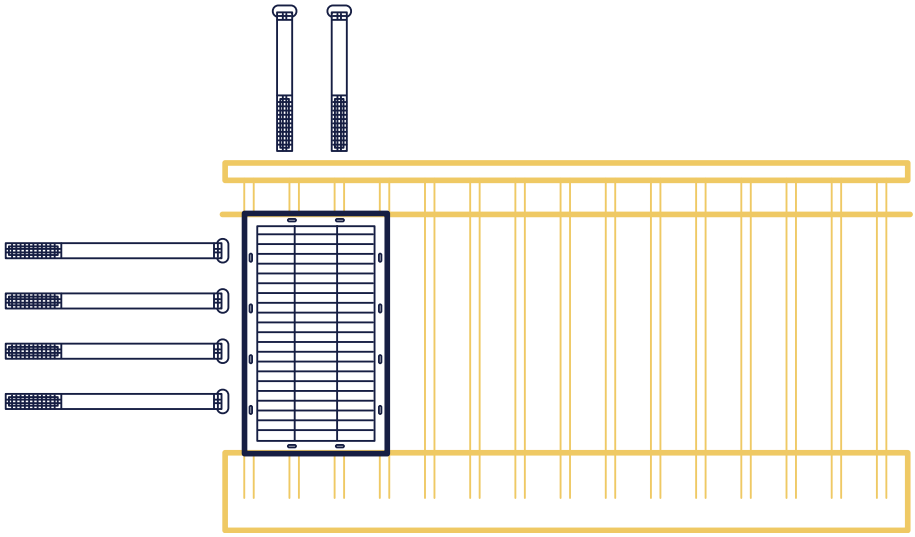
We have no additional protective plastic packing for environmental reasons, so the solar panels may get a little dusty during transportation.

Next step
Attach panels

03/08
Attach the panels

Use the attachment straps to attach the panels to the outside of your fence with the mounting straps.





The fixing straps are available in two sizes. Check which strap is best suited for your fence.

Please note

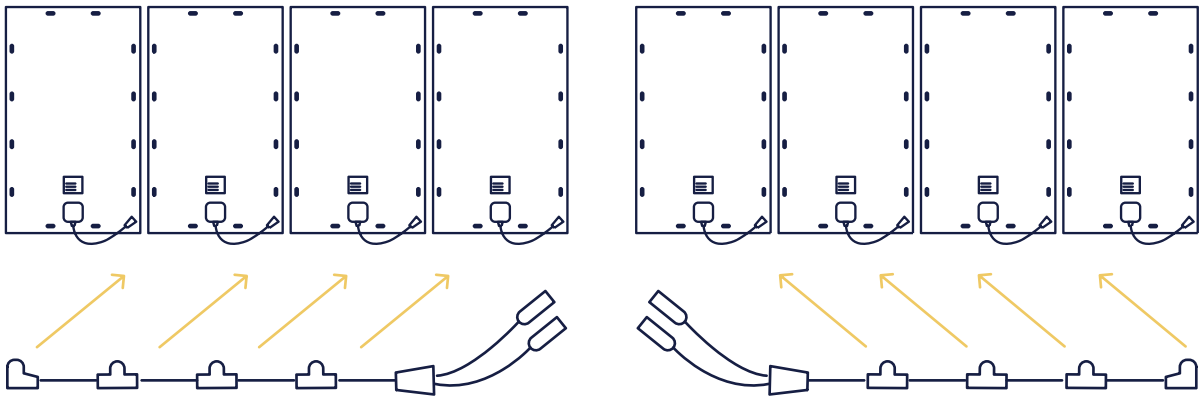
- Make sure someone else holds the solar panels for you while you mount them.
- The solar panel can be released when 2 bands are mounted.
- For permanent use, make sure that at least 4 straps are mounted on the balcony railing with 2 each on opposite sides of the panel. However, we do advise to attach all the straps which visually will make it look much nicer.

Next step
Connect panels

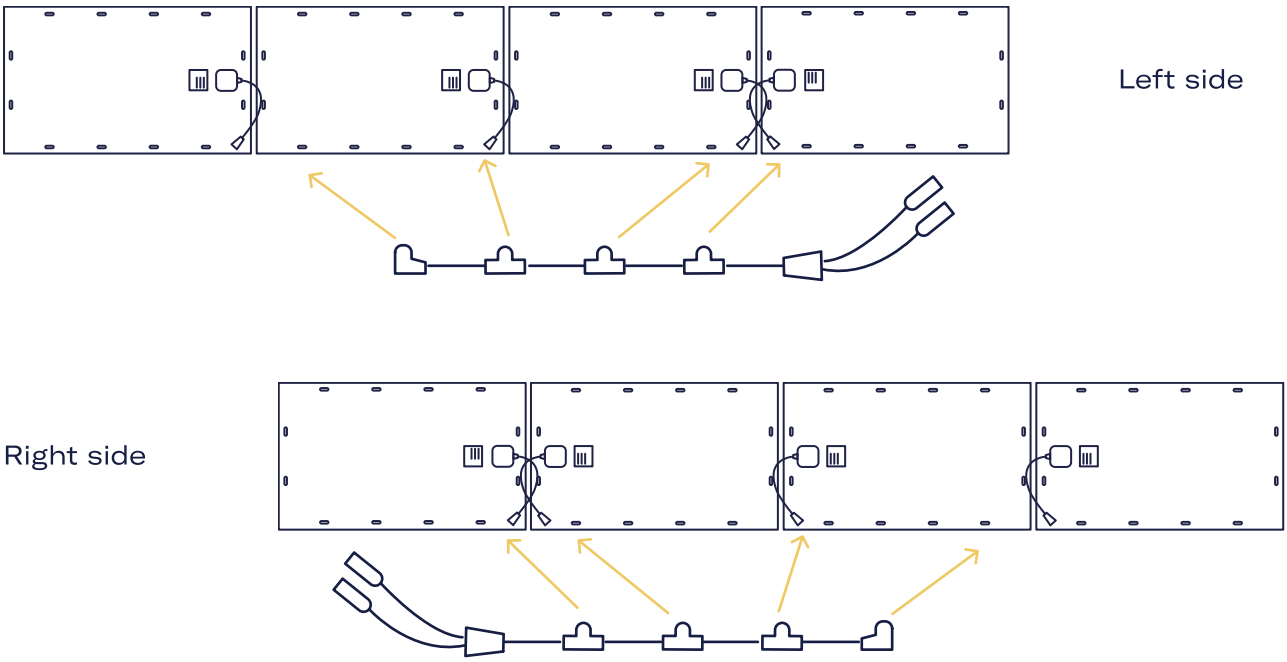
04/08

Connect panels to connecting cable

Connect each panel with one of the two connecting cables.



Vertical mounting



Horizontal mounting

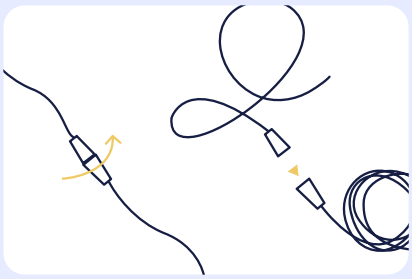
Use one connection cable to connect the four left solar panels and the other connection cable for the four right solar panels. If you use less than eight panels, you can of course choose the right/left distribution. You should hear a click sound when plugging in.

Please note

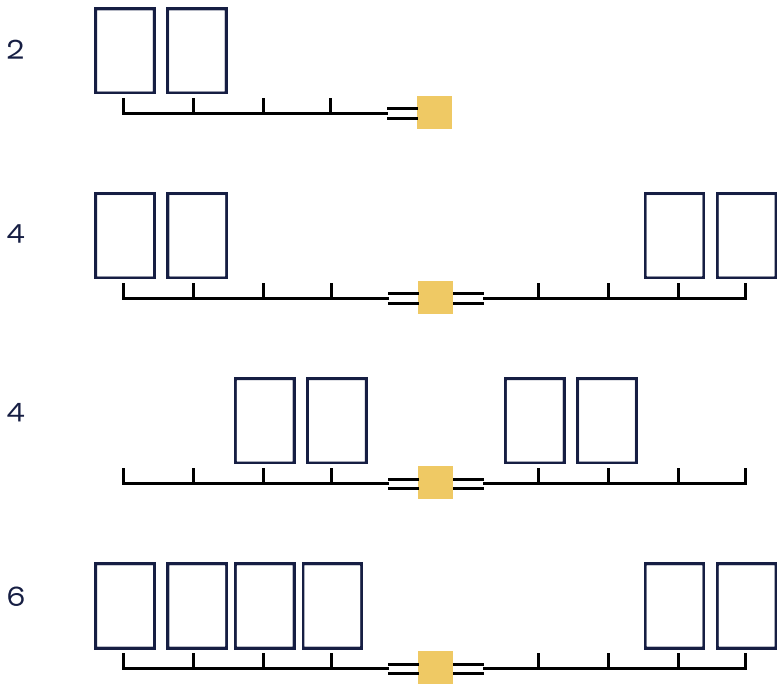
Panels can only ever be installed in pairs, so in total two, four, six or eight. With five panels, for example, only four would produce energy.

You can freely choose the distribution of the panels right/left as long as you do not create a connection gap along a connecting cable. Use either the first two of the four connections on the connecting cable or the last two.

We recommend using both connection sides of the microinverter to optimize power production.



Detach the connecting cables: Rotate the cable connector and then pull it apart

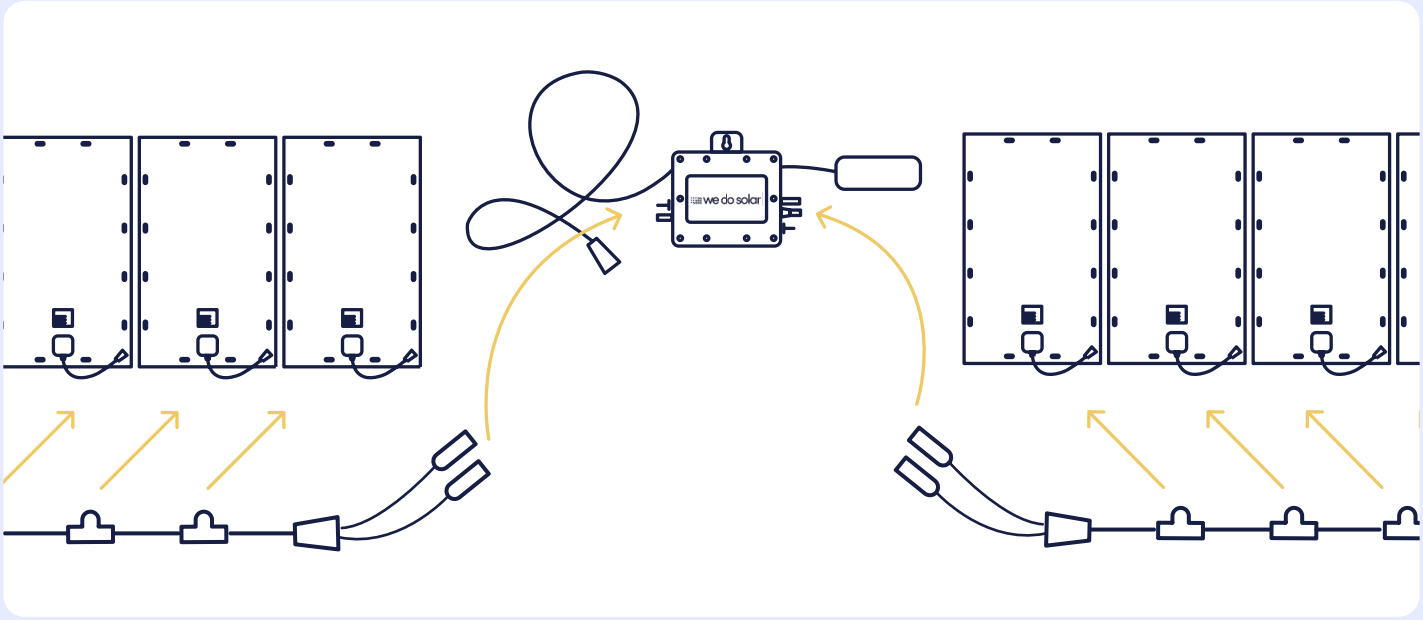


Next step
Attach microinverter

05/08

Attach the microinverter and plug in the connection cable

Mount the microinverter centrally between the panels and plug in the two connecting cables on both sides.



Please note

Unused connections on the panels themselves should be protected from moisture. A fully connected set does not need additional protection.

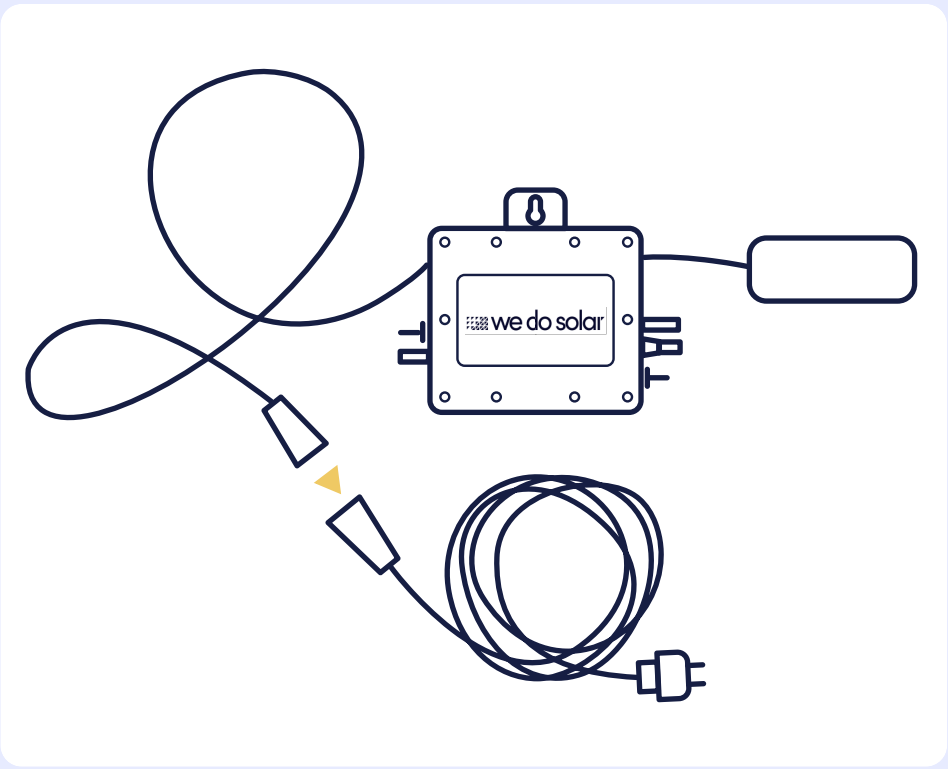
The microinverter does not need to be protected from weather influences to any particular extent. Nevertheless, a protected mounting is recommended.

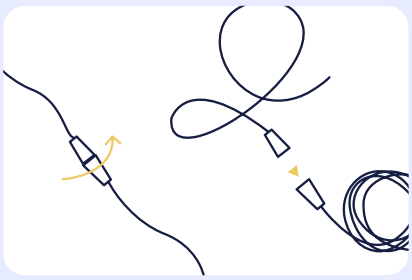
Next step
Connect the microinverter

06/08

Connect the microinverter with the power cable

You should hear a click sound when you connect them.





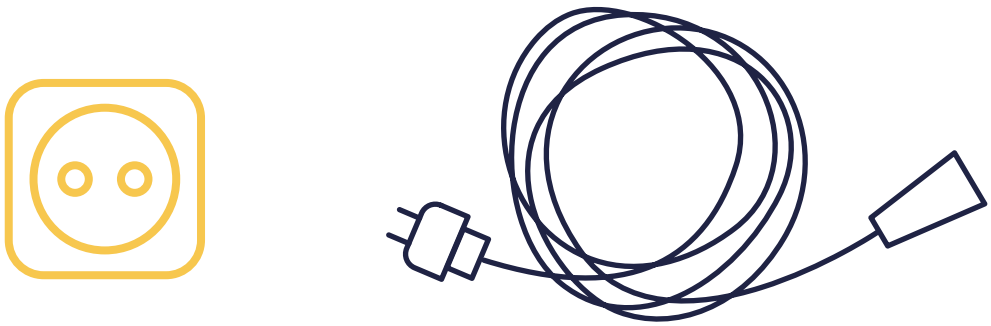
Detach the connecting cables: Rotate the cable connector and then pull it apart

Next step
Connect power cable

07/08

Plug the power cord into the socket

Now you can connect your solar power set to your power grid and feed in solar energy. Done!



Please note

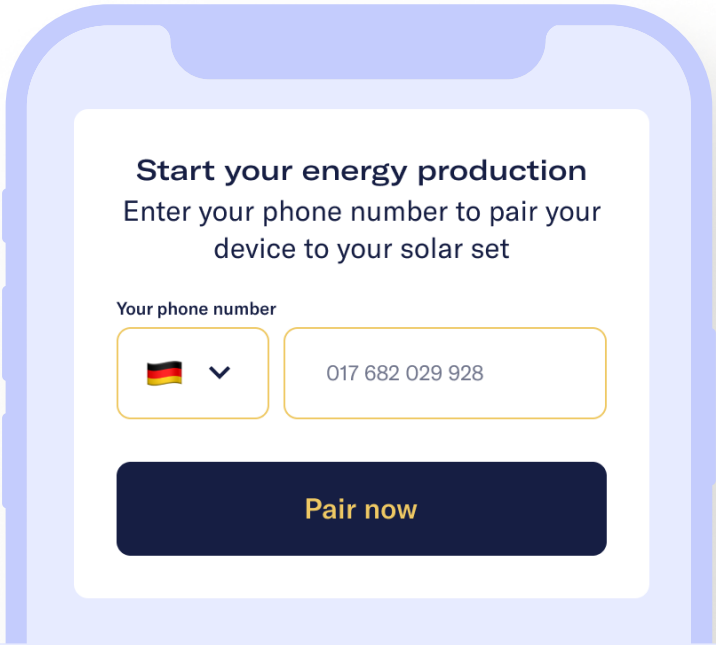
The main cable must not be extended, neither with an extension cable nor with a multiple socket outlet.

Next step
Connect to the app

08/08

Open the We Do Solar app and pair your solar set

Log in to the We Do Solar app with your mobile number to pair it and see what your solar set is producing in real time.



You can download the app from the Play Store or the App Store.

GET IT ON Google Play

Download on the App Store

Please note

Use the phone number you specified when placing your order. If you want to use another phone number, please contact our customer service.

You did it!

Welcome to our green family!

We are happy that you have chosen the smart solar privacy screen from We Do Solar. By using solar energy in your home, you will help reduce CO2 emissions and bring us closer to our Net-Zero goal. At the same time, you will also use less electricity from the grid, making you a little more independent.

We have included some additional information and recommendations on the following pages that will enrich your We Do Solar experience.

Have fun and enjoy your solar set!

Best regards,
Your We Do Solar Team

Good to know

Inform your grid operator

After installation, you should register your solar system with the energy provider. This can be done via the provider's website or by calling the customer hotline. You can also use the sample form provided by us.

In some cases, the grid operator may have to install a different meter. This is done automatically. The installation is done in minutes and costs you nothing.

Download form

Register at the Market Master Data Register

Your solar system must be registered in a system register of the Federal Network Agency, the so-called market master data register. We will gladly take care of this for you! Simply contact our customer service in the app or via the We Do Solar website.

If you would like to register yourself, you can do so under the following link. Unfortunately, the registration is only available in German:

Register independently

Recommend this to a friend

Create even more impact for the planet by recommending We Do Solar to your friends and family. You can find your personal invitation link in the app.

Good to know

Cleaning and care

The We Do Solar panels require very low maintenance. We recommend that you visually inspect the system 1-2 times a year to see if the attachment has loosened or if there are any other visual changes. If the panels are a little dusty, you can simply wipe them with demineralized water and a soft cloth.

Repurchase

If you need a replacement part for one of the set components, simply contact our customer service. We will promptly deliver a replacement to the address of your choice.

Return

Sustainability is important to us! If your living situation changes and you cannot take your solar system with you, you are welcome to return it to us.

We Do Solar customer service: we are here for you!

Email

support@we.do.solar

Hotline

+49 30 2000 49777

Online Chat

we.do.solar

Educate yourself on how to use your home in an energy-mindful manner

Replace incandescent lightbulbs with LEDs

Turn off unused equipment. Unplug appliances or use a power strip

Take shorter showers. Avoid taking a bath

Keep doors and windows closed when heating or air conditioning is running

Wash clothes on lower temperature

Try to use energy efficient household devices

Use rechargeable batteries

Do not leave your phone plugged in overnight

Switch to a laptop computer when working from home

Turn lights off when they’re not in use

Don’t leave electrical appliances on standby

Reduce ironing and electric clothing dryers

Appendix

Calculation of the line capacity

Please read these instructions carefully before starting the assembly work. Damage caused by improper handling will void any liability and warranty claims. Keep the assembly instructions for future reference.

The PI Photovoltaik-Institut Berlin in cooperation with the Deutsche Gesellschaft für Sonnenenergie (DGS), the Hochschule für Technik und Wirtschaft (HTW) Berlin have worked out in a study that it is possible in every household with circuit breakers without any safety concerns to feed in up to 2.6 amperes (equivalent to a solar visual protection set) with plug-in solar devices, without having to make any changes to the house electric setup.

However, there may be a deviation from the valid standard for line load may occur. We have described here how you can comply with the requirements of the standard and test your cable, described here.

If a solar visual protector feeds into the existing end circuit, it is possible that the current load on individual cable sections exceeds the rated current. sections of the cable, the current load may exceed the designed normal size.

To prevent an overload of the cables in the household, these are protected by a circuit breaker (LSS). This switches off automatically as soon as an overload occurs. As a rule, several sockets and and consumers are protected by a common line protection.

Due to the additional power of the solar system, the currents from the utility grid and the solar circuit breaker can now add up. However, the currents are not detected by the circuit breaker, so that an overload can theoretically occur. You can determine whether the existing line with your circuit breaker is sufficiently dimensioned with the following formula:

$$I_z = I_n + I_g$$

I_z Permissible current carrying capacity of the cable
I_n Rated current of the protective device (circuit breaker)
I_n Rated current of the power generation system

I_z indicates the current carrying capacity of the line, which should be greater than the sum of the rated current of the protective device (circuit breaker in amperes) and the power generation system (power in amperes). Both I_z and I_g can be found in the table on the following page for the corresponding example application. can be found in the table on the following page.

Load capacity of copper cables

Transfer in:	heat-isulated walls	Electrical-installation-pipes	Walls	Air
Current carrying capacity I_z of the conductors of the final circuit (in A)	16,5	17,5	21	23
Maximum rated current I_g of the power generation system with 16 A circuit breaker (in A)	0,5	1,5	5	7
Maximum rated current I_g of the power generation system with 13 A circuit breaker (in A)	3,5	4,5	8	10
Maximum current load I_g of the We Do Solar set (in A)	2,6 (corresponds 600W)			

The example in the table above is based on two loaded copper lines with a nominal cross-section of of 1.5mm^2, which reflects the line in a typical German household. For larger cross section or a different type of cable, the permissible current carrying capacity is different, so that this must be calculated separately, according to DIN VDE 0298-4.

If the cable is a copper cable with a core cross-section of 3 x 1.5 mm, then the cable is designed for a continuous load of 16.5 A (in thermally insulated walls at 25 °C). The free capacity results from the difference of the cable with 16.5 A, minus the circuit breaker with 16 A. The free capacity is therefore 0.5 A in thermally insulated walls. If the solar power exceeds the current of 0.5 A, then the circuit breaker should be replaced with a smaller one in order to comply with the requirements of the DIN VDE 2948-4 standard. By exchanging the fuse
against a smaller 13 A fuse, 13 A can now still be drawn from the mains, resulting in free capacity for the power line with the difference of 3.5 A. This is then sufficient to cover the power of the solar visual protection with 2.6 A.

we do solar

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