ESS

Easy-Solar-System®.fr

Easy Solar Box® (ESB)

Weighted support for ground-mounted photovoltaic installation.

Support for framed modules.

WARRANTY 20 YEAR WARRANTY

Quick and effective solution.

Practicality and performance at your fingertips !

BENEFITS

- ✓ **Compatible** with all types of floor
- ✓ **Compatible** with all sizes of commercially available framed modules
- ✓ **Easy installation** without floor fixing into the ground or specific masonry
- ✓ **Does not require** administrative formalities (height < 1.80m)
- ✓ **Quick assembly** in less than 8 minutes
- ✓ **Easy assembly** with only 2 tools: 1 x 16 mm flat wrench, 1 x mallet

TECHNICAL SPECIFICATIONS

CONFIGURATION	Portrait mode modules 1 or 2 panel(s)
INCLINATION	35°
COLOR	Metallic grey
MATERIAL	Magnelis® ZM 310 steel
WEIGHT WITHOUT BALLASTING	31,6 kg
BALLASTING SYSTEM	180 litres - ballast up to 450 kg
COMPATIBILITY	Compatible with all framed modules on the market
RAIL DIMENSIONS	2 rails of 240 cm composed of 2 half-rails of 120 cm

FIXINGS / BALLASTING

2 fixing modes:

1. **PowARsnap** (provided with your mount in the hardware bag)
2. **Clamps** (purchase separately)

1

2

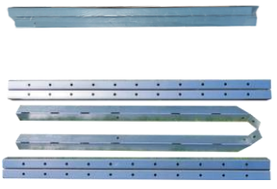
USER MANUAL

Kit contents

Package # 1 : Box

- 2 front/rear plates (42 x 50 cm)
- 2 side plates (82 x 50 cm)
- 1 base plate (42 x 80 cm)
- 1 support plate (28 x 43 cm) (electrical or string inverter box)
- 2 rail fishplates (45 x 5 cm)
- 2 35° rail supports (Front support 53 cm / Back 43 cm)
- 1 bag of accessories: 10 ZM M10 bolts, 10 ZM M10 nuts, 2 ZM M8 bolts, 2 ZM M8 nuts, 8 powARsnap
- Tightening torque of ZM M10 bolts: 27 Nm

Package #° 2 : Rails



- 2 rear corners (60 x 120 cm)
- 4 rails (120 cm)

Package # 3 : Connecting fishplates between ESB (optional)

- 2 rail fishplates (45 x 5 cm)
- bag of 4 ZM M10 bolts and 4 ZM M10 nuts

Necessary material

Cut-resistant gloves

16 flat key

Maillet

Time

less than 8 minutes per medium

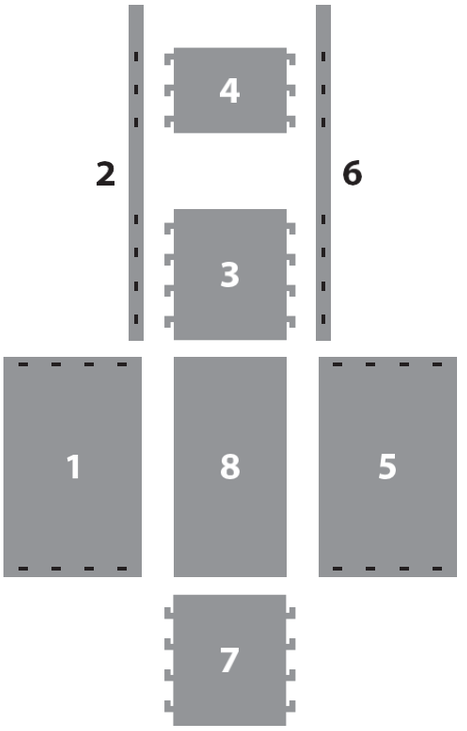
Sécurity

Be sure to follow the instructions step by step and use the proper hardware.
For your safety, make sure all components are securely fastened before using the structure.
Remember to ground your installation.

ASSEMBLY OF THE STRUCTURE

Set up

1 - Start by placing the structural elements on the ground in accordance with the diagram opposite.



Step #1

Take the side plate (no. 1) and the left corner (# 2), position them vertically.

Insert the back plate (#3) into the corner of the bracket (#2), carefully aligning the corresponding cutouts.

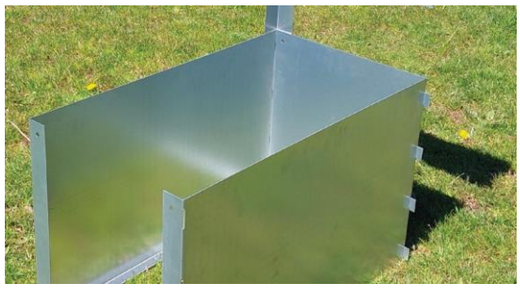
The whole thing now stands upright alone.

Step #2

Fix the support plate of the electrical box or the string inverter (# 4) on the left angle iron (# 2) by inserting the notches into the cutouts provided for this

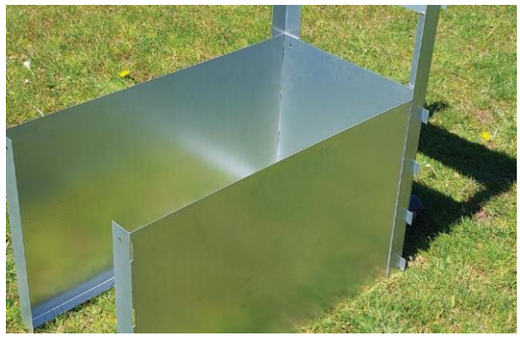
Step #3

Take the side plate (#5). Slide the notches of the back plate #3 into the cutouts provided for this purpose on the side plate (#5).



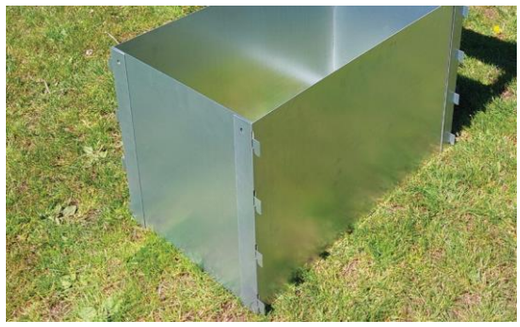
Step #4

Insert the straight angle (# 6) into the notches of the rear plate (# 3), as well as those of the inverter support plate # 6.



Step #5

Secure the front plate (#7) by engaging its notches in the slots of the side plates (#1 and #5).



Step #6

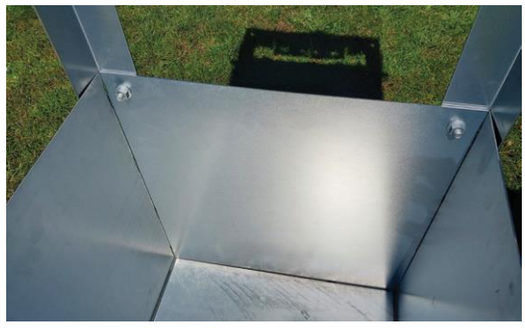
Place the bottom plate (# 8) in the frame thus formed.

Be careful to complete this step before moving on to step 7.

Step #7

Fix the rear bracket to the corners using 2 ZM M10 bolts.

Respect the tightening torques.
The nut is easily held with one hand, with the key on the bolt.



Step #8

Use a mallet to knock back all visible notches on the side plates, front and rear, including the chain inverter support plate or electrical box, by 90°.

Step #9

Attach the front rail bracket (#10) to the front face (#7) using the ZM M10 bolts.

Tighten firmly using a flat wrench. Respect the tightening torque.

The nut is easily held with one hand, with the key on the

bolt.

Step #10

Attach the rear rail bracket (#9) to the left (#2) and right (#5) corners using the ZM M10 bolts.

Tighten firmly using a flat wrench. Respect the tightening torque.
The nut is easily held with one hand, with the key on the bolt.

Step #11

Assemble the rails together by inserting the fishplate (# 11) into the first rail (# 12) up to the stop.

Slide the second rail (#12) to join it to the first.

Repeat the step a second time for the second set.

Step #12

Attach the rails to the front (#10) and rear (#9) brackets using the ZM M10 bolts.
Tighten firmly using a flat wrench. Respect the tightening torque.
The nut is easily held with one hand, with the key on the bolt.

For a single panel, attach only 1 rail centered on the front and rear brackets

Step #13

Secure the microinverter to the rear rail bracket (#9) using the supplied M8 ZM bolts.

Step #14

Attach the electrical box or your string inverter to the back of the support plate (# 4).

Assemble several Easy Solar Box modules for more display space.

ESB modules can be assembled together to accumulate exhibition surfaces.

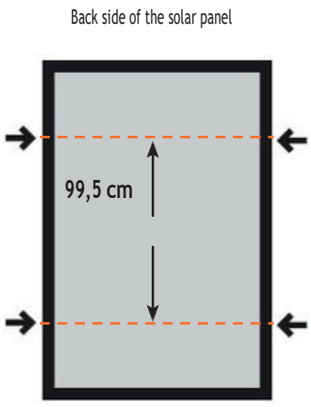
1 support = 1 or 2 panels
2 supports = 4 panels...

For each additional support, you must provide the connection kit consisting of 2 fishplates and 4 ZM M10 bolts with nuts (optional)

ASSEMBLING THE PANELS SOLAR

Step #15

Please note that the center distance between the PowARsnaps must be 99.5 cm.
Stand in front of the support with the glass of the panel on the support side.
Start by placing the PowARsnap clips onto the solar panel approximately 30cm from the bottom edge of the panel, ensuring that the notch in the clip fits over the edge of the panel frame.
Once the panel is equipped with its PowARsnaps, turn it from bottom to top to put it in place.



Step #16

Secure the panel by starting by clipping the PowARsnaps onto the bottom rail.
Then lift the top of the panel and clip the PowARsnaps onto the top.
When placing each clip on the rails, make sure you hear the click and then check that it is properly engaged.

Our sustainability tips!

To preserve your boxes, place them on a neutral support such as gravel, gravel slabs, concrete or sand. Avoid acidic soils with a pH below 7 which can corrode metal.
Stabilize each box with a minimum weight of 270 kg of gravel for climatic zone no. 1 and up to 450 kg of ballast for climatic zone no. 3 or area highly exposed to the wind with for example 32 gravel slabs measuring 40x40 cm. Fill the bin (gravel, paving stones, 40 x 40 cm concrete slabs).

Tips :

1. *.Connect all supports together before weighting them.*
2. *When installing the modules on the supports, start from the center of your configuration. The rails are longer than the width of the modules, this will allow you to cut off the parts of the rails that protrude at each end, making your installation more aesthetic and compact.*
3. *Leave a space of 1 cm between each module to allow for thermal expansion.*
4. *Close the open ends of the rails with standard caps to protect your installation and finish it cleanly.*
5. *Ground your installation. powARsnaps ensure equipotential continuity (modules/structure)*