



## Solar Panles TX-series

TX - light-weight solar panels with textile frame of high-quality tarpaulin fabric. Foldable, with up to 4 wings. For sprayhood, bimini, wind dress and cover. - Made in Germany.

### Product charateristics

- Circumferential soft fabric edge for mounting on textile surfaces / coverings
- Appropriate Tenax base parts for fastening are enclosed
- Multi-wing modules are foldable
- With 12V modules, each wing of a TX module works as a separate module, with 24V modules in pairs
- Waterproof plug and coupler are enclosed, for simple and quick electrical installation
- 1m connecting cable + 10m cable (3m at TX-11027) are included
- 100% sea- & saltwater resistant
- Partly also available as 24V version
- Crystalline cells of highest performance class for maximum power
- Non-Glass-module with unbreakable Nowoflon foil
- Light-weight mounting plate, 3mm aluminium sandwich, powder-coated white, fully encased in EVA
- Cable output screwed, sealed and utterly water proof
- Ultraflat module construction (5mm), at cable output 15mm
- 100% maintenance-free, self-cleaning surface
- 3 years warranty on power output

	TX-11027	TX-12039	TX-12052	TX-22039 (TX-22239)	TX-22052 (TX-22252)	TX-42039 (TX-42239)	TX-42052 (TX-42252)
<b>Power</b> [Wp]	<b>17</b>	<b>38</b>	<b>50</b>	<b>76</b>	<b>100</b>	<b>152</b>	<b>200</b>
System voltage [V]	12	12	12	12 (24)	12 (24)	12 (24)	12 (24)
I <sub>sc</sub> [A]	1,0	2,2	3,0	4,4 (2,2)	6,0 (3,0)	8,8 (4,4)	12,0 (6,0)
I <sub>max</sub> [A]	0,9	2,0	2,7	4,0 (2,0)	5,5 (2,75)	8,0 (4,0)	11,0 (5,5)
U <sub>oc</sub> [V]	22,8	22,8	22,8	22,8 (45,6)	22,8 (45,6)	22,8 (45,6)	22,8 (45,6)
Length A [mm]	668	873	1106	873	1106	929	1164
Width [mm]	333	431	431	826	826	1590	1590
Pack size (L x B) [cm]				90 x 42 x 4	115 x 42 x 4	95 x 42 x 6	120 x 42 x 6
Tenax fasteners [no.]	–	8	10	8	10	12	12
Weight netto [kg]	1,0	2,2	2,6	4,2	5,1	8,2	10,9
Weight brutto [kg]	1,5	5,4	6,4	7,2	8,8	11,7	14,4
Cable (2 x 2,5 mm <sup>2</sup> ) [m]	3,0	1+10	1+10	1+10	1+10	1+10	1+10
No. of wings	1	1	1	2	2	4	4

**Valid for all TX-modules:** laminate: ETFE/EVA/ETFE / carrier plate: Alu-Sandwich white / individually packed / series connection of 12V modules only permitted if a cell protector is used per module /

Permitted environmental conditions: – 40 bis + 85 °C

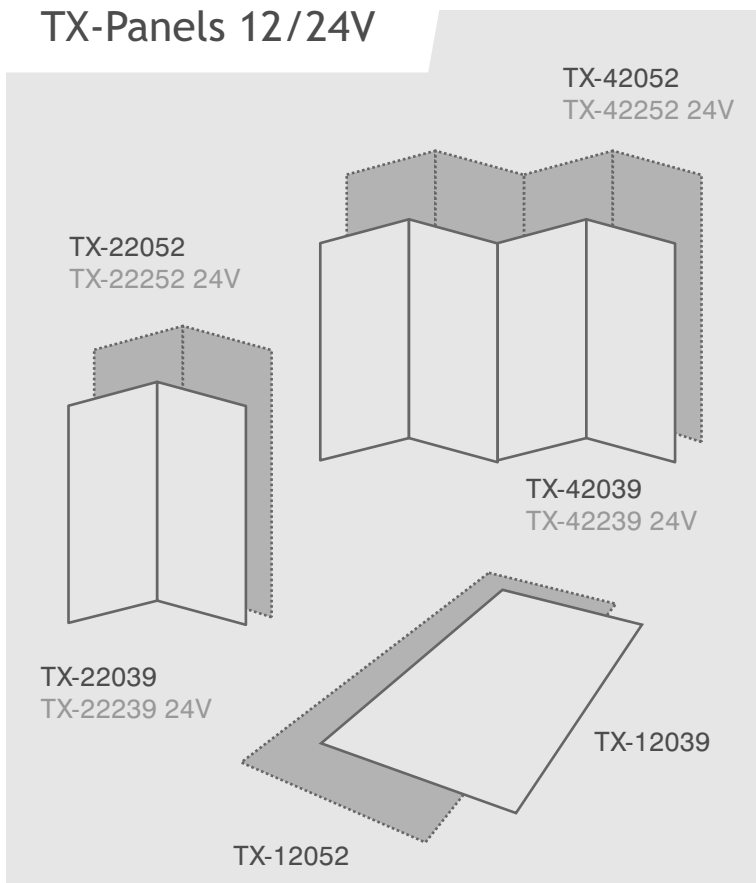
Thermal characteristic values of multicrystalline solar cells: TK I<sub>sc</sub>: 0,6%/K, TK U<sub>oc</sub>: -0,34%/K, TK P<sub>mpp</sub>: -0,43%/K

P<sub>max</sub> according to STC (standard test conditions) AM 1,5, 1000 W/m<sup>2</sup>, 25°C, measurement tolerance: 10%.



Technical changes reserved. State 11/2017

## TX-Panels 12/24V



## RANGE OF APPLICATIONS

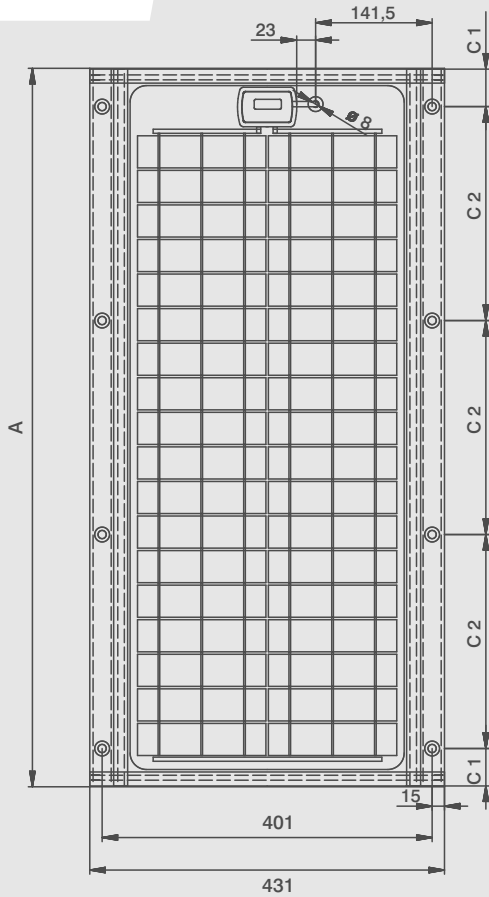
- For motor boats and sailing yachts
- For camping and caravan
- For mobile current supply



## Installation notes

- TX solar modules are sewn into a textile frame. The soft transition from the rigid module to the textile frame allows the modules to be fastened to taut textile surfaces such as sprayhood, bimini or tarpaulin.
- The module itself is fastened to textile tops using Tenax fasteners. Matching Tenax base parts for textile surfaces are enclosed with each module.
- Each wing of a multi-wing module works independently. This reduces power loss in case of partial shading.

## DIMENSIONS

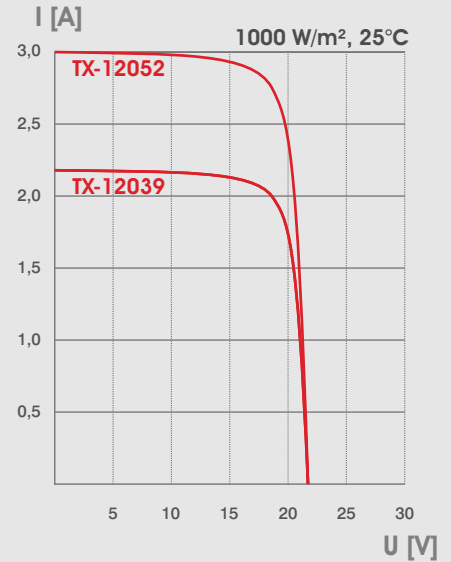


## TX-12039/-12052

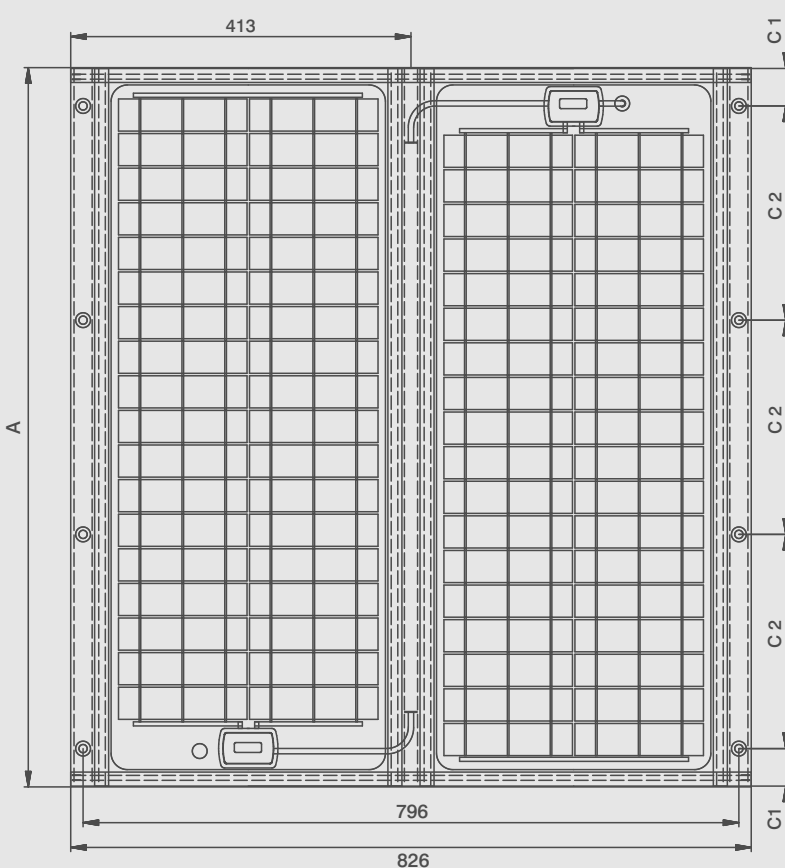
	A [mm]	C 1 [mm]	C 2 [mm]
TX-12039	873	45,5	260
TX-12052	1106	51,0	251

Technical drawings at [www.sunware.de/download](http://www.sunware.de/download)

## Electrical characteristic



## DIMENSIONS

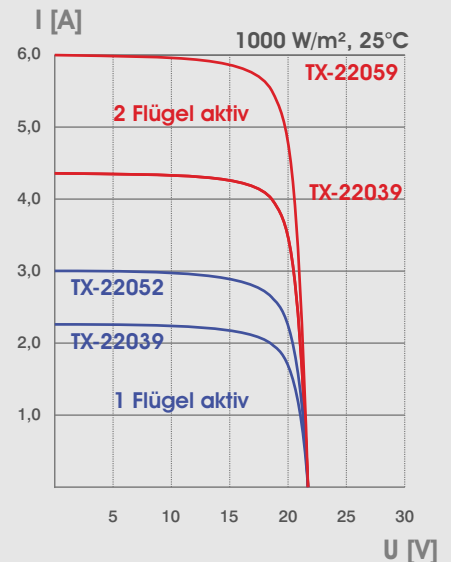


## TX-22039/-22239/-22052/-22252

	A [mm]	C 1 [mm]	C 2 [mm]
TX-22039/ -22239	873	45,5	260
TX-22052/ -22252	1106	51,0	251

Technical drawings at [www.sunware.de/download](http://www.sunware.de/download)

## Electrical characteristic

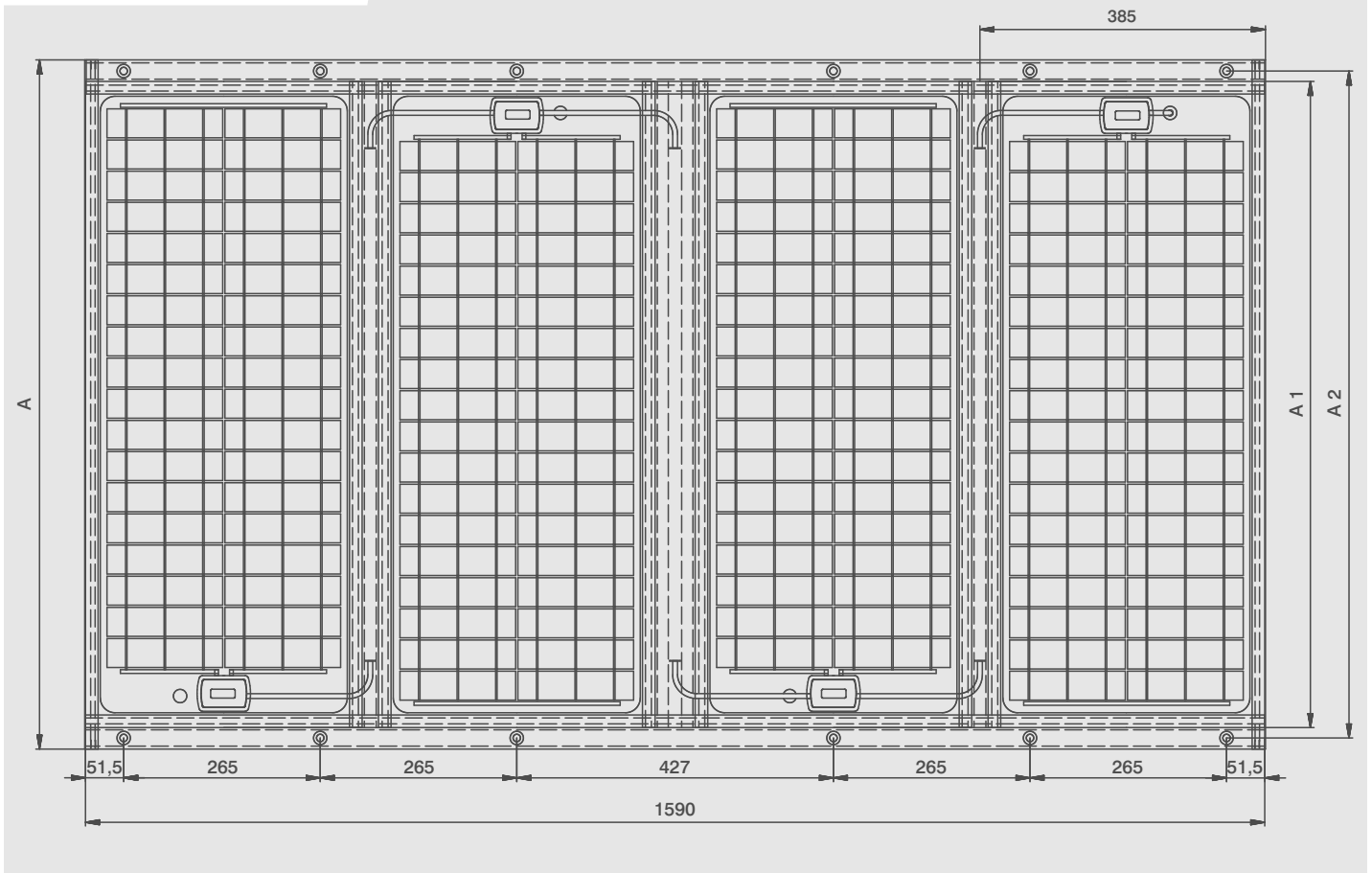


TX-42039/-42239/-42052/-42252

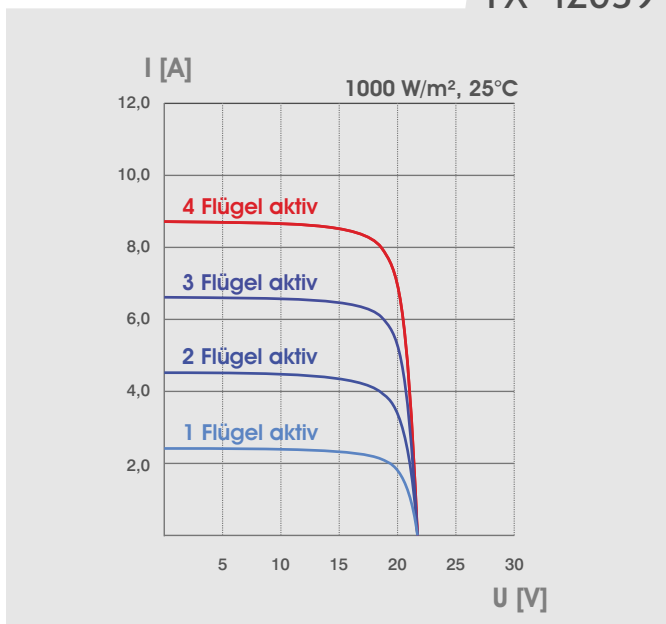
	A [mm]	C 1 [mm]	C 2 [mm]
TX-42039/ -42239	929	871	899
TX-42052/ -42252	1164	1106	1134

Technical drawings at [www.sunware.de/download](http://www.sunware.de/download)

## DIMENSIONS



## Electrical characteristic TX-42039



## Electrical characteristic TX-42052

