



Extremely flat,
fully accessible
and semi-
flexible.

SOLARA M-Series

EXTREMELY FLAT, WALKABLE AND SEMI-FLEXIBLE

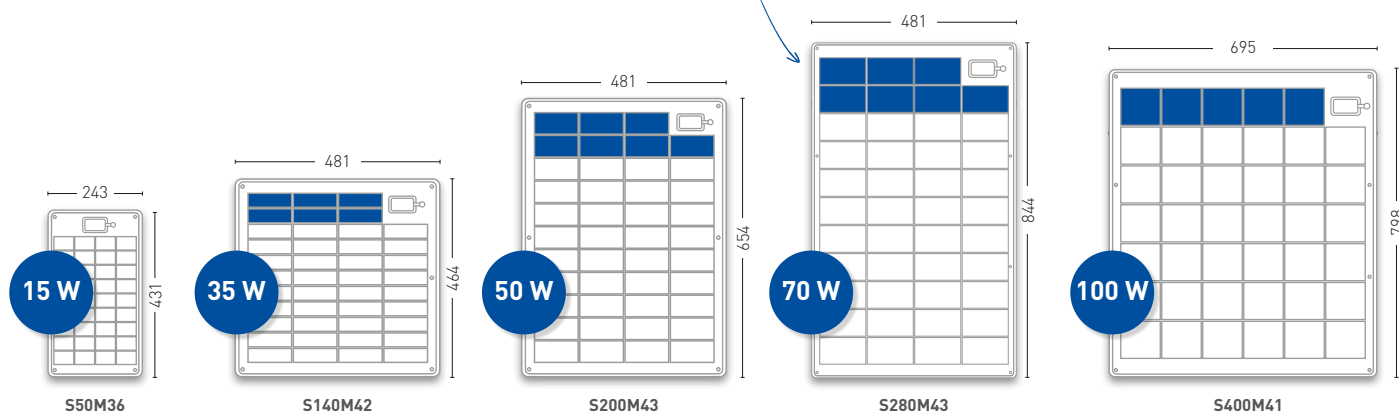
- Stability and maximum heat dissipation due to innovative aluminium-sandwich support plate
- Additional solar cells for efficient charging
- Maximum daily yield due to additional single cells
- All materials withstand extreme heat, high humidity, sea and salt water
- Teflon-type extremely resistant protective film on front and back
- Flat, glued and screwed cable outlet with strain relief
- Cell protector with external protection diodes included
- Cable lead-through already prepared in the carrier plate
- Manufactured exclusively in Germany



SOLARA M-Series



Extra cells
for efficient
charging!



PERFORMANCE

Type	S50M36	S140M42	S200M43	S280M43	S400M41
Daily output in summer in Germany (Ø) Wh/d	50	140	200	280	400
Rated output ¹ (P _{mpp}) Wp	15	35	50	70	100
Short-circuit current (I _{sc}) A	0.72	1.44	2.15	2.85	4.29
Open-circuit voltage (U _{oc}) V	24.48	28.56	29.24	29.24	27.88
Voltage (U _{mpp}) V	20.88	24.36	24.94	24.94	23.87
Current (I _{mp}) A	0.69	1.38	2.05	2.72	4.10
No. of cells	36	42	43	43	41

¹ Performance at STC, Standard Testing Conditions: 1000 W/m², AM 1.5, cell temperature 25° C

Dimensions and weight

Dimensions (L x W x H) mm	431 x 243 x 4	464 x 481 x 4	654 x 481 x 4	844 x 481 x 4	798 x 695 x 4
Weight kg	0.7	1.5	2.0	2.6	3.5
Cell dimensions mm	52 x 35	104 x 35	104 x 52	104 x 69	104 x 104

Thermal properties

TK P _{mpp} %/C	-0.40
TK U _{oc} %/C	-0.32
TK I _{sc} %/C	0.06
NOCT °C	46 ± 2

Used materials

Cell technology	Monocrystalline PERC with up to 22 % efficiency
Front/back	ETFE front and back side foil, welded at the edge
Cable outlet	Solid, small, flat, seawater-tight, glued and screwed
Hotspot protector (external)	Enclosed with S200M43, S280M43 and S400M41
Connecting cable	3 m, 2 x 1.5mm ² oder 3 x 1.5mm ²

More technical data

Measuring accuracy P _{mpp} at STC	± 5 %
Operating temperature range	-40°C to +85°C

