



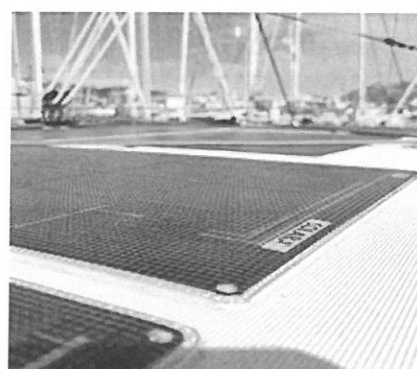
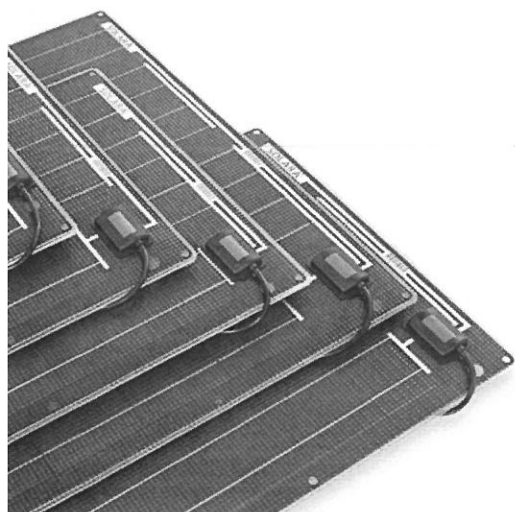
SOLARA®
module. komponenten. systeme

Extremely flat,
fully accessible
and semi-
flexible.

SOLARA M-Series

EXTREMELY FLAT, WALKABLE AND SEMI-FLEXIBLE

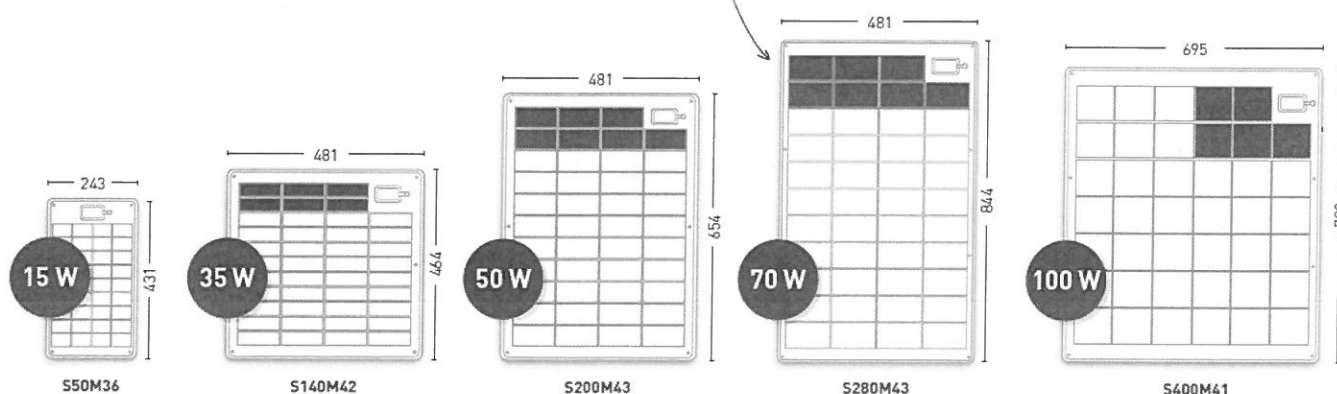
- Stability and maximum heat dissipation due to innovative aluminium-sandwich support plate
- Additional solar cells for efficient charging
- Maximum daily yield due to additional single cells
- All materials withstand extreme heat, high humidity, sea and salt water
- Teflon-type extremely resistant 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 _{mpp}) 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 | 0.9 | 1.7 | 2.2 | 2.8 | 3.7 |
| Cell dimensions mm | 52 x 35 | 104 x 35 | 104 x 52 | 104 x 69 | 104 x 104 |

Thermal properties

| | |
|-------------------------|--------|
| TK P _{mpp} %/K | -0.45 |
| TK U _{oc} %/K | -0.36 |
| TK I _{sc} %/K | 0.03 |
| NOCT °C | 46 ± 2 |

Used materials

| | |
|------------------------------|-------------------------------------------------------|
| Cell technology | Monocrystalline cells |
| 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 |

2 of these

More technical data

| | |
|--------------------------------------------|----------------|
| Reverse current IR loadability | 12 A |
| Measuring accuracy P _{mpp} at STC | ± 5 % |
| Operating temperature range | -40°C to +85°C |

PROVED
SOLARA®
QUALITY



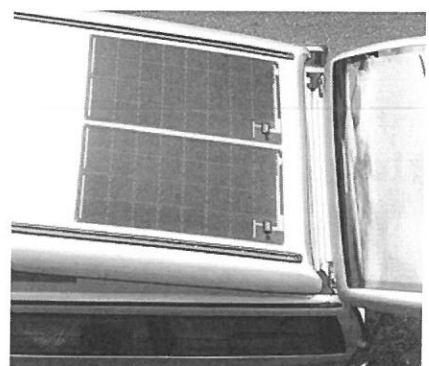
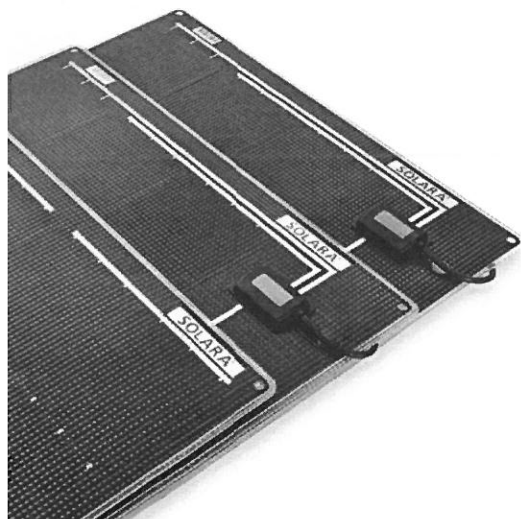
SOLARA®
module. komponenten. systeme

Long
lasting even
under the
harshest
conditions.

SOLARA Power M-Series

HIGHEST DAILY YIELDS BY SUNPOWER CELLS

- Solar cells with over 23 % efficiency
- Additional solar cells for efficient charging
- Highest yields in every season due to excellent low-light performance - even in diffused light
- Designed and manufactured for permanent use on water and on land
- All materials withstand extreme heat, high humidity, sea and salt water
- External cell protector with protection diodes included
- Extremely flat module construction with aluminium sandwich support plate
- Flat, glued and screwed cable outlet with strain relief
- Fully walkable on firm ground
- Cable lead-through already prepared in the carrier plate
- Manufactured exclusively in Germany

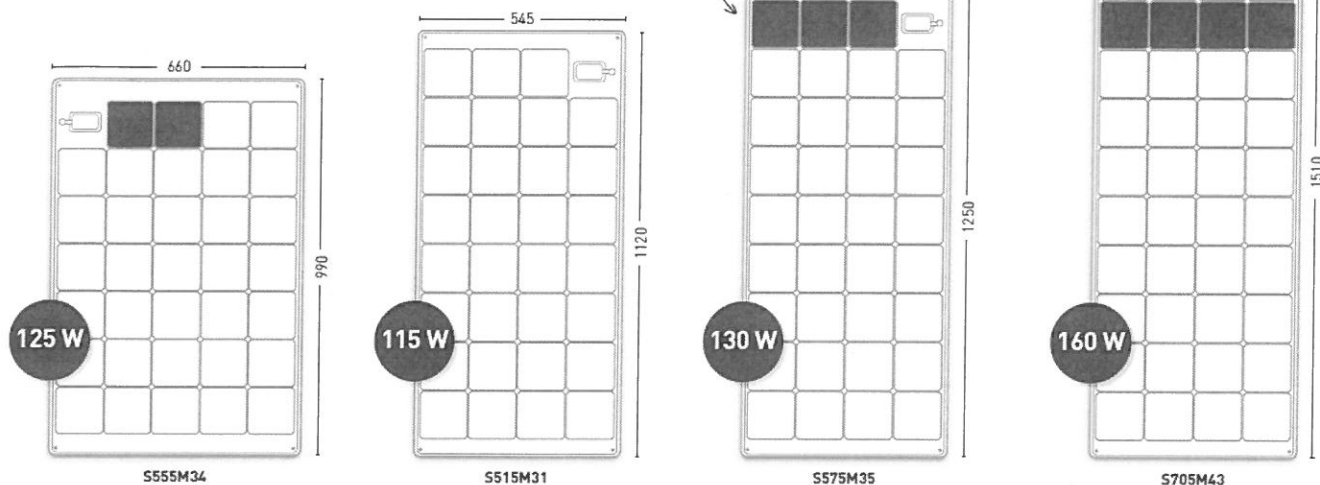


SOLARA Power M-Series



Now
even more
power

Extra cells
for efficient
charging!



PERFORMANCE

| Type | S555M34 | S515M31 | S575M35 | S705M43 |
|-------------------------------------------------|---------|---------|---------|---------|
| Daily output in summer in Germany [Ø] Wh/d | 555 | 515 | 575 | 705 |
| Rated output ¹ (P _{mp}) Wp | 125 | 115 | 130 | 160 |
| Short-circuit current (I _{sc}) A | 6.40 | 6.40 | 6.40 | 6.40 |
| Open-circuit voltage (U _{oc}) V | 24.82 | 22.63 | 25.55 | 31.39 |
| Voltage (U _{mp}) V | 21.08 | 19.22 | 21.70 | 26.66 |
| Current (I _{mp}) A | 6.04 | 6.04 | 6.04 | 6.04 |
| No. of cells | 34 | 31 | 35 | 43 |

¹Performance 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 | 990 x 660 x 4 | 1120 x 545 x 4 | 1250 x 545 x 4 | 1510 x 545 x 4 |
| Weight kg | 4.2 | 3.6 | 4.4 | 5.2 |
| Cell dimensions mm | 125 x 125 | 125 x 125 | 125 x 125 | 125 x 125 |

Thermal properties

| | |
|--------------------------|--------|
| TK P _{mp} %/°C | -0.29 |
| TK U _{oc} mV/°C | -1.74 |
| TK I _{sc} mA/°C | 2.90 |
| NOCT °C | 46 ± 2 |

Used materials

| | |
|------------------|---------------------------------------------------|
| Cell technology | Sunpower, monocrystalline with backsheet |
| Front/back | ETFE front and back side foil, welded at the edge |
| Cable outlet | Solid, flat, seawater tight, glued and screwed |
| Connecting cable | 3 m, 2 x 2.5 mm ² |

2 of these

More technical data

| | |
|-------------------------------------------|----------------|
| Reverse current IR loadability | 12 A |
| Measuring accuracy P _{mp} at STC | ± 5 % |
| Operating temperature range | -40°C to +85°C |

PROVED
SOLARA®
QUALITY

Quality
Made in
Germany

5 years
product
guarantee*