

MODEL SV144 E HCM10



Premium quality



Power output
range 535-550 Wp



100% EL testing



Mechanical load
up to 5400 Pa



Low weight



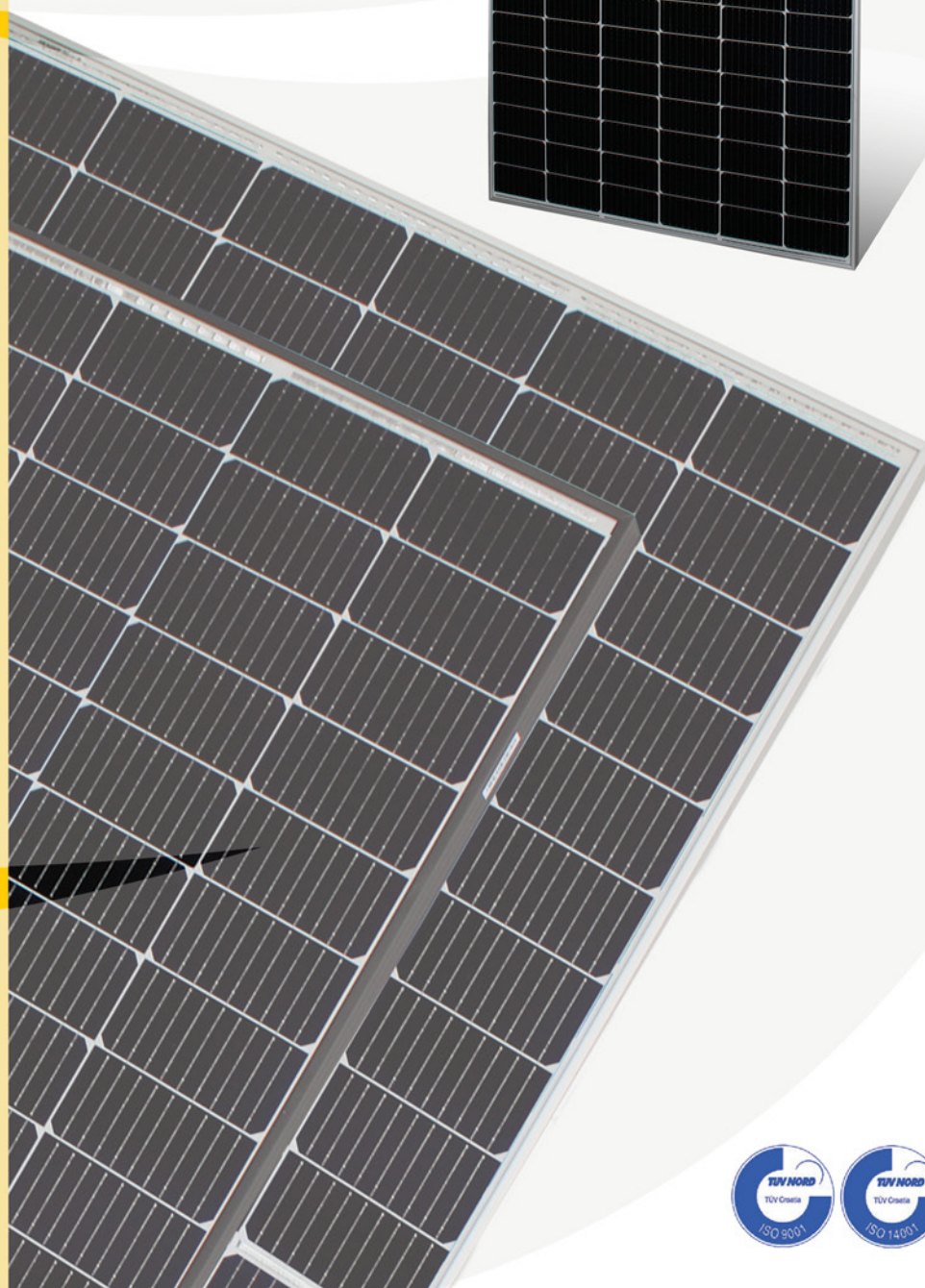
Module efficiency
up to 21,28%



Positive power
tolerance -0/+5 W



IEC EN 61215-1,-1-1,-2
IEC EN 61730-1,-2



Warranty:

15

years manufacturing defects

12

years limited,
90% output power

25

years limited,
80% output power



| Electrical parameters at Standard Test Conditions (STC) | | | | | |
|---|-----|-------------------|-------------------|-------------------|-------------------|
| MODEL | | SV144-535 E HCM10 | SV144-540 E HCM10 | SV144-545 E HCM10 | SV144-550 E HCM10 |
| Peak power P_{MPP} | [W] | 535 | 540 | 545 | 545 |
| Peak power tolerance | [W] | -0/+5 | | | |
| Short circuit current I_{SC} | [A] | 13,62 | 13,67 | 13,72 | 13,77 |
| Open circuit voltage V_{OC} | [V] | 49,51 | 49,64 | 49,85 | 50,07 |
| Rated current I_{MPP} | [A] | 12,86 | 12,91 | 12,96 | 13,01 |
| Rated voltage V_{MPP} | [V] | 41,59 | 41,82 | 42,04 | 42,27 |
| Current and voltage tolerance | [%] | ± 3 | | | |
| Module efficiency | [%] | 20,70% | 20,89% | 21,09% | 21,28% |

STC: 1000W/m² irradiance, 25 °C cell temperature, AM1, 5 g spectrum according to EN 60904-3
Average relative efficiency reduction of 3,4 % at 200 W/m² according to EN 60904-1

| Electrical parameters at Nominal Module Operating Temperature (NMOT) | | | | | |
|--|-----|-------------------|-------------------|-------------------|-------------------|
| MODEL | | SV144-535 E HCM10 | SV144-540 E HCM10 | SV144-545 E HCM10 | SV144-550 E HCM10 |
| Peak power P_{MPP} | [W] | 405,1 | 408,9 | 412,7 | 416,5 |
| Peak power tolerance | [W] | -0/+5 | | | |
| Short circuit current I_{SC} | [A] | 11,00 | 11,04 | 11,08 | 11,12 |
| Open circuit voltage V_{OC} | [V] | 47,0 | 47,2 | 47,4 | 47,6 |
| Rated current I_{MPP} | [A] | 10,26 | 10,30 | 10,32 | 10,36 |
| Rated voltage V_{MPP} | [V] | 39,5 | 39,7 | 40,0 | 40,2 |

NMOT: module operating parameters at 800 W/m² irradiance, 20 °C ambient temperature, 1 m/s wind speed

| MECHANICAL DATA | |
|------------------------|---|
| Dimensions (H x W x D) | [mm] 2279 x 1134 x 35 |
| Weight | [kg] 27,0 |
| Solar cells | 144 cells, mono-Si, 182x91 mm +/- 1 mm |
| Cells encapsulation | Ethylene vinyl acetate (EVA) |
| Front | Tempered solar glass, 3,2 mm |
| Back | Composite polyester Film |
| Frame | Anodized aluminium frame with twin-wall profile and drainage holes |
| Junction box | min. IP67 with 3 Bypass diodes, |
| Cable and connectors | Solar cable 4 mm ² , length >300 mm, MC4 compatible connectors |

NOTE: For extended models, SV144 E HCM10, voltages and currents can vary where YYY is optional based on the chosen YYY variant (YYY = letter(s), F for black frame, B for silver frame and black backsheet, BC for full black module)

| OPERATING CONDITIONS | | |
|-------------------------------|------|---|
| Temperature range | [°C] | -40 to +85 |
| Maximum system voltage | [V] | 1500 |
| Max. series fuse rating | | 25A |
| Limiting reverse current | | 20A |
| Maximum surface load capacity | | 5400 Pa (Snow load) |
| Resistance against hail | | Max. diameter of 25 mm with impact speed 23 m/s |

| THERMAL CHARACTERISTICS | | |
|--------------------------------------|-------|--------|
| Temperature coefficient of P_{MPP} | [%/K] | -0,35 |
| Temperature coefficient of I_{SC} | [%/K] | 0,05 |
| Temperature coefficient of V_{OC} | [%/K] | -0,275 |

