

MODEL SV144 E HCM10



Premium quality



Power output
range 535-550 Wp



100% EL testing



Mechanical load
up to 5400 Pa



Low weight



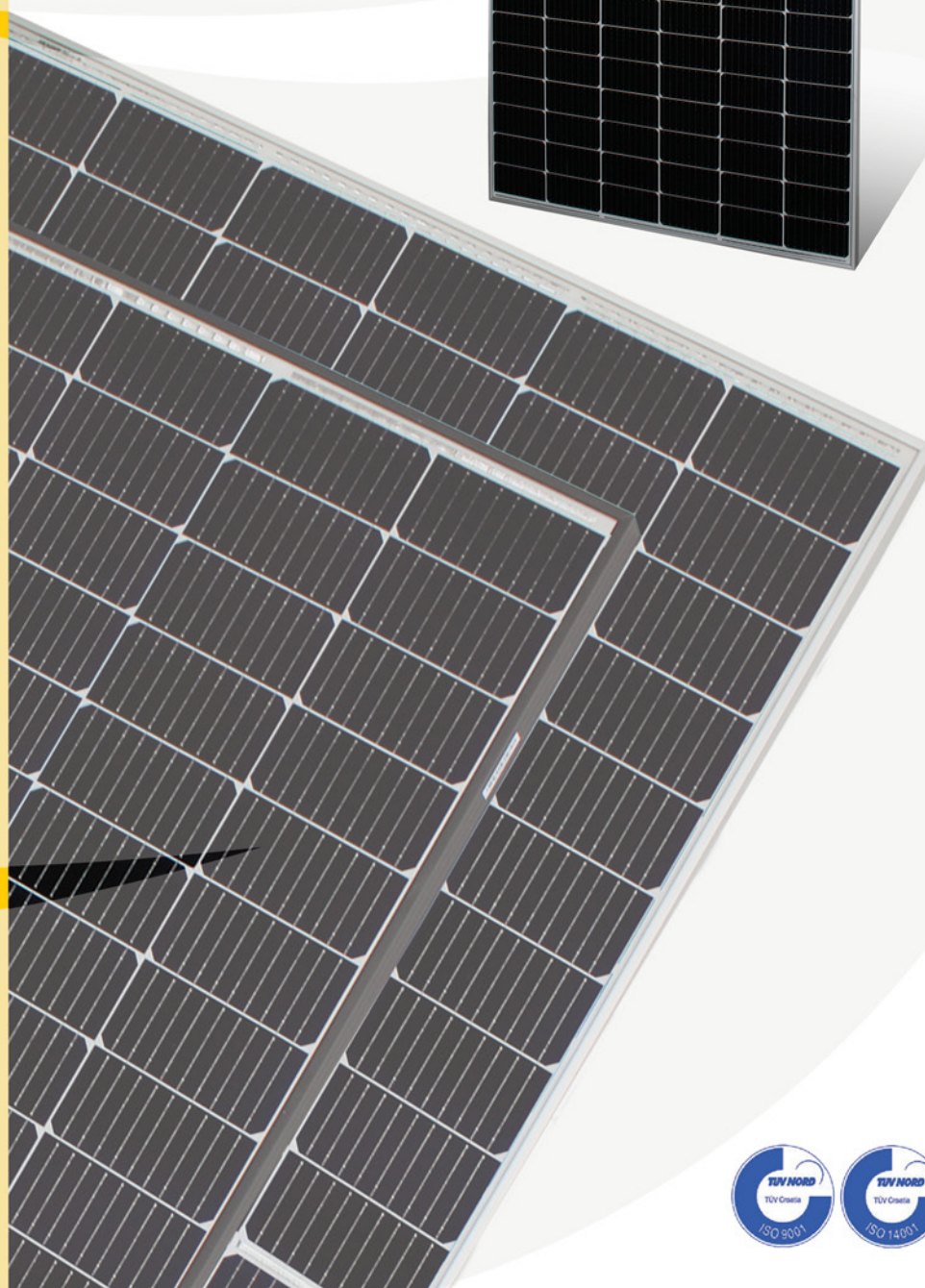
Module efficiency
up to 21,29%



Positive power
tolerance -0/+5 W



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



Warranty:

10 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	550
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]	12,87	12,92	12,97	13,02
Rated voltage V_{MPP}	[V]	41,60	41,83	42,05	42,28
Current and voltage tolerance	[%]	± 3			
Module efficiency	[%]	20,71	20,90	21,10	21,29

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] 2278 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 1400 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

