

## MODEL SV108 E F GG22 HCM10

*Bifacial*



Premium quality



Power output  
range 420-430 Wp



100% EL testing



Mechanical load  
up to 5400 Pa



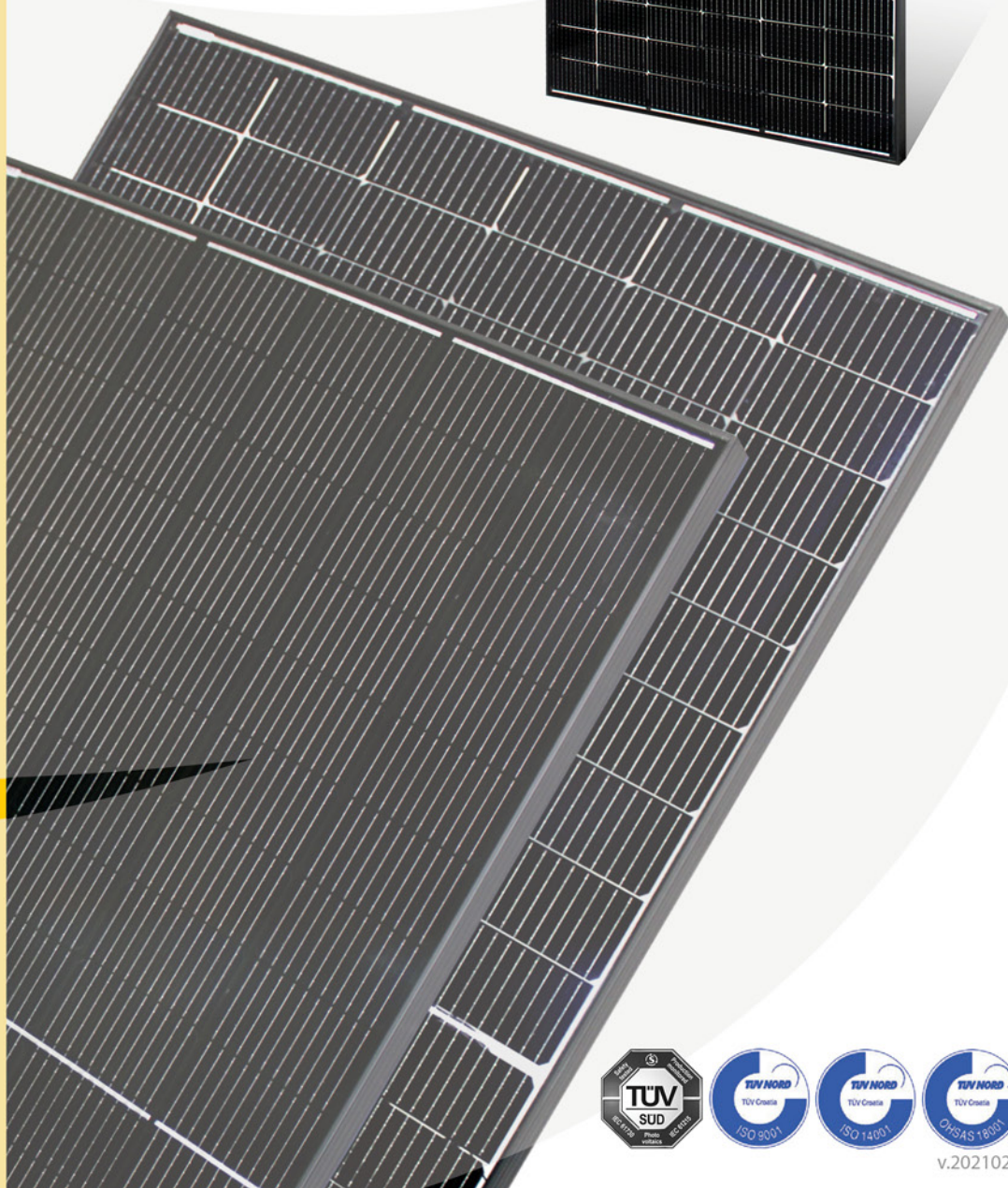
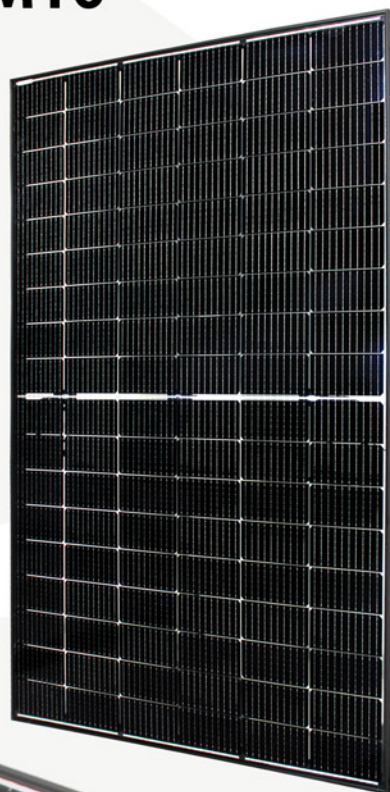
Module efficiency  
up to 22,02%



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		SV108-420 E F GG22 HCM10	SV108-425 E F GG22 HCM10	SV108-430 E F GG22 HCM10
Peak power $P_{MPP}$	[W]	420	425	430
Peak power tolerance	[W]		-0/+5	
Short circuit current $I_{SC}$	[A]	14,15	14,67	14,31
Open circuit voltage $V_{OC}$	[V]	37,89	38,07	38,25
Rated current $I_{MPP}$	[A]	13,40	13,48	13,56
Rated voltage $V_{MPP}$	[V]	31,36	31,55	31,73
Current and voltage tolerance	[%]		$\pm 3$	
Module efficiency	[%]	21,51	21,76	22,02

STC: 1000W/m<sup>2</sup> irradiance, 25 °C cell temperature, AM1, 5 g spectrum according to EN 60904-3  
Average relative efficiency reduction of 3,4 % at 200 W/m<sup>2</sup> according to EN 60904-1

Electrical parameters at Nominal Module Operating Temperature (NMOT)				
MODEL		SV108-420 E F GG22 HCM10	SV108-425 E F GG22 HCM10	SV108-430 E F GG22 HCM10
Peak power $P_{MPP}$	[W]	318,0	321,8	325,6
Short circuit current $I_{SC}$	[A]	11,43	11,50	11,56
Open circuit voltage $V_{OC}$	[V]	36,0	36,2	36,3
Rated current $I_{MPP}$	[A]	10,67	10,73	10,78
Rated voltage $V_{MPP}$	[V]	29,8	30,0	30,2

NMOT: module operating parameters at 800 W/m<sup>2</sup> irradiance, 20 °C ambient temperature, 1 m/s wind speed

Electrical parameters at Bifacial Name Plate Irradiance (BNPI)				
MODEL		SV108-420 E F GG22 HCM10	SV108-425 E F GG22 HCM10	SV108-430 E F GG22 HCM10
Peak power $P_{MPP}$	[W]	462	468	473
Short circuit current $I_{SC}$	[A]	15,68	16,25	15,86
Open circuit voltage $V_{OC}$	[V]	37,89	38,07	38,25
Rated current $I_{MPP}$	[A]	14,73	14,83	14,91
Rated voltage $V_{MPP}$	[V]	31,36	31,55	31,73

BNPI: 1000 W/m<sup>2</sup> irradiance on module front size and 135 W/m<sup>2</sup> irradiance on module rear side

MECHANICAL DATA	
Dimensions (H x W x D)	[mm] 1722 x 1134 x 30
Weight	[kg] 24,3
Solar cells	108 cells, mono-Si, 182x91 mm +/- 1 mm
Cells encapsulation	POE (Polyolefin Elastomer) / Ethylene vinyl acetate (EVA)
Front	Tempered solar glass, 2,0 mm
Back	semi-tempered glass 2,0 mm
Frame	Black anodized aluminum frame with twin-wall profile and drainage holes
Junction box	min. IP68 with 3 Bypass diodes
Cable and connectors	Solar cable 4 mm <sup>2</sup> , length 1100 mm, MC4 compatible connectors

OPERATING CONDITIONS		
Temperature range	[°C]	-40 to +85
Maximum system voltage	[V]	1500
Max. series fuse rating		30A
Limiting reverse current		25A
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

