



MODEL SV48



-  Premium quality
-  Power output range 205-220 Wp
-  100% EL testing
-  Mechanical load up to 5400 Pa
-  Low weight
-  Module efficiency up to 16,75 %
-  Positive power tolerance -0/+4,9 Wp
-  Made in Europe
-  IEC EN 61215
IEC EN 61730-1, -2
-  IEC EN 62716 Ed.1
-  IEC EN 61701
-  IEC TS 62804-1
(PID resistance)

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		SV48-205	SV48-210	SV48-215	SV48-220
Peak power P_{MPP}	[W]	205	210	215	220
Peak power tolerance	[W]	-0/+4,9			
Short circuit current I_{SC}	[A]	8,61	8,68	8,77	8,87
Open circuit voltage V_{OC}	[V]	29,62	30,10	30,43	30,72
Rated current I_{MPP}	[A]	8,22	8,35	8,41	8,50
Rated voltage V_{MPP}	[V]	25,05	25,23	25,62	25,91
Current and voltage tolerance	[%]	± 3			
Module efficiency	[%]	15,61	15,99	16,37	16,75

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 Operating Cell Temperature (NOCT)					
MODEL		SV48-205	SV48-210	SV48-215	SV48-220
Peak power P_{MPP}	[W]	148,6	152,1	155,5	158,9
Peak power tolerance	[W]	-0/+4,9			
Short circuit current I_{SC}	[A]	6,96	7,02	7,09	7,17
Open circuit voltage V_{OC}	[V]	27,0	27,4	27,7	28,0
Rated current I_{MPP}	[A]	6,63	6,76	6,79	6,88
Rated voltage V_{MPP}	[V]	22,4	22,5	22,9	23,1

NOCT: 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] 1324 x 992 x 35
Weight	[kg] 15,0
Solar cells	48 cells, polycrystalline Si, 156 x 156 mm +/- 1mm
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	IP67 with 3 Bypass diodes,
Cable and connectors	Solar cable 4 mm ² , length 1200 mm

NOTE: For extended models, SV48 YYY, 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]	1000
Max. series fuse rating		15A
Limiting reverse current		15A
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]	-0,41
Temperature coefficient of I_{SC}	[%/K]	0,05
Temperature coefficient of V_{OC}	[%/K]	-0,31

