



MODEL SV48 E



-  Premium quality
-  Power output range 210 - 225 Wp
-  100% EL testing
-  Mechanical load up to 5400 Pa
-  Low weight
-  Module efficiency up to 17,03 %
-  Positive power tolerance -0/+4,9 W
-  Made in Europe
-  IEC EN 61215 certified
-  IEC EN 61730 - 1 certified
-  IEC EN 61730 - 2 certified
-  PID test passed

Warranty:

- 20** years manufacturing defects
- 15** years limited, 90% output power
- 30** years limited, 80% output power



Certificate Number BBT0715

Electrical parameters at Standard Test Conditions (STC)					
MODEL		SV48-210 E	SV48-215 E	SV48-220 E	SV48-225 E
Peak power P_{MPP}	[W]	210	215	220	225
Peak power tolerance	[W]	-0/+4,9			
Short circuit current I_{SC}	[A]	9,14	9,28	9,48	9,68
Open circuit voltage V_{OC}	[V]	30,4	30,5	30,7	30,8
Rated current I_{MPP}	[A]	8,50	8,62	8,84	9,06
Rated voltage V_{MPP}	[V]	24,8	25,0	24,9	25,0
Current and voltage tolerance	[%]	± 3			
Module efficiency	[%]	15,89	16,27	16,65	17,03

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		SV48-210 E	SV48-215 E	SV48-220 E	SV48-225 E
Peak power P_{MPP}	[W]	152,82	156,19	159,55	164,27
Peak power tolerance	[W]	-0/+4,9			
Short circuit current I_{SC}	[A]	7,34	7,45	7,62	7,78
Open circuit voltage V_{OC}	[V]	28,1	28,2	28,3	28,4
Rated current I_{MPP}	[A]	6,73	6,82	6,99	7,17
Rated voltage V_{MPP}	[V]	22,7	22,9	22,8	22,9

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, monocrystalline Si, 156 x 156 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	IP67 with 3 Bypass diodes,
Cable and connectors	Solar cable 4 mm ² , length 1000 mm, MC4 compatible connectors

NOTE: For extended models, SV48 EYYY, 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 (1500 Opt. on Request)
Max. series fuse rating	15A
Limiting reverse current	15A
Maximum surface load capacity	5400 Pa (Snow load)
Resistance against hail	Maximum diameter of 25 mm with impact speed 23 m/s

THERMAL CHARACTERISTICS	
Temperature coefficient of P_{MPP}	[%/K] -0,42
Temperature coefficient of I_{SC}	[%/K] 0,05
Temperature coefficient of V_{OC}	[%/K] -0,33

