



MODEL SV120 E F HCM10
TOPCon technology

480 W

Maximum power output

-0/+4,9 W

Positive power sorting

22,17%

Maximum Efficiency



Premium quality



100% EL testing



Power output range
470-480Wp



Mechanical load
down to 5400 Pa*



Low weight



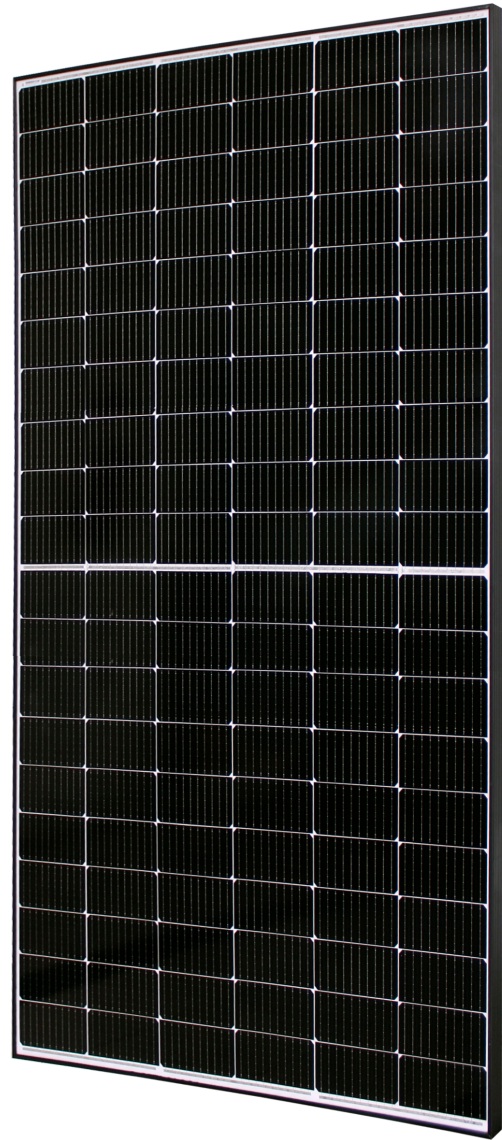
EN IEC 61215-1,-1-1,-2
EN IEC 61730-1, -2



Module efficiency
up to **22,17%**



Made in Europe



Warranty:

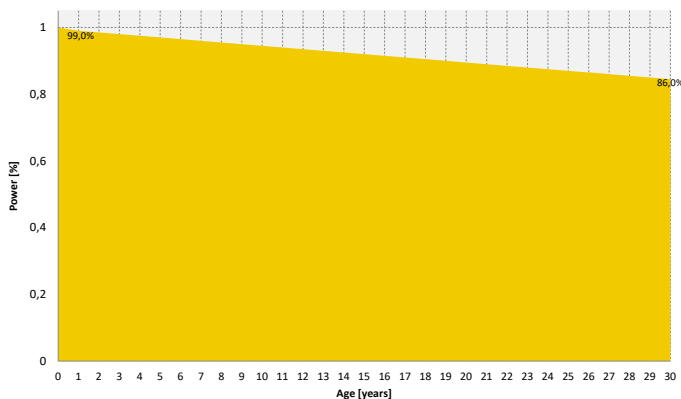


20 years manufacturing
defects



30 years limited,
86% output power

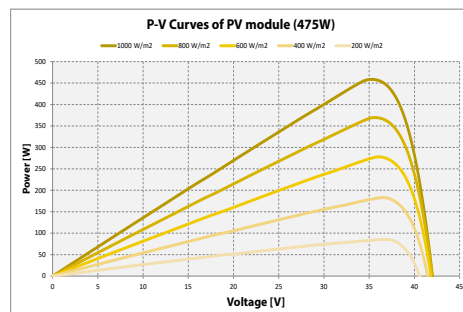
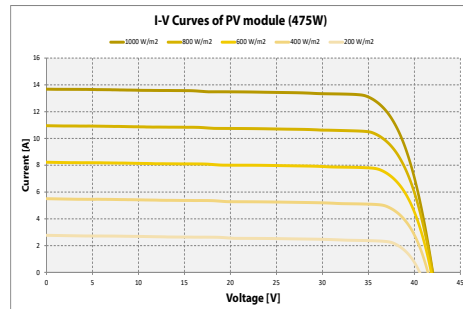
Module power degradation:



Electrical parameters at Standard Test Conditions (STC)

MODEL		SV120-470 E F HCM10	SV120-475 E F HCM10	SV120-480 E F HCM10
Peak power P_{MPP}	[W]	470	475	480
Peak power sorting	[W]		-0/+4,9	
Short circuit current I_{SC}	[A]	14,23	14,31	14,39
Open circuit voltage V_{OC}	[V]	42,42	42,63	42,86
Rated current I_{MPP}	[A]	13,51	13,59	13,67
Rated voltage V_{MPP}	[V]	34,81	34,97	35,13
Module efficiency	[%]	21,71	21,94	22,17
Cell efficiency	[%]	>24,4	>24,7	>25,0

STC: 1000 W/m² irradiance, 25 °C cell temperature, AM 1,5 g spectrum according to EN 60904-3. Machine measurement tolerance: +/- 3%. Machine measurement rating: AAA. Primary electrical value for product type rating is P_{MPP} . I and V values can vary up to +/- 10% for the same P_{MPP} rating. Average relative efficiency reduction of 3,4% at 200 W/m² according to EN 60904-1.



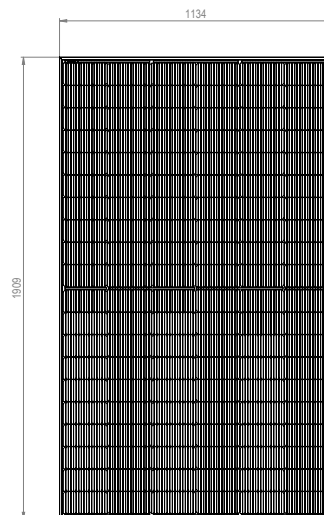
Electrical parameters at Nominal Module Operating Temperature (NMOT)

MODEL		SV120-470 E F HCM10	SV120-475 E F HCM10	SV120-480 E F HCM10
Peak power P_{MPP}	[W]	355,9	359,7	363,4
Short circuit current I_{SC}	[A]	11,50	11,56	11,63
Open circuit voltage V_{OC}	[V]	40,3	40,5	40,7
Rated current I_{MPP}	[A]	10,75	10,83	10,88
Rated voltage V_{MPP}	[V]	33,1	33,2	33,4

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]	1909 x 1134 x 35
Weight	[kg]	22,3
Solar cells		TOPCon, 120 cells, mono-Si, 182x91 mm +/- 1 mm
Front		AR Coated, Tempered solar glass, 3,2 mm
Back		Composite polyester Film
Frame		Black anodized aluminium frame with twin-wall profile and drainage holes
Junction box		IP68 with 3 Bypass diodes
Cable and connectors		Solar cable 4 mm ² , length 1100 mm, MC4 compatible connectors



OPERATING CONDITIONS

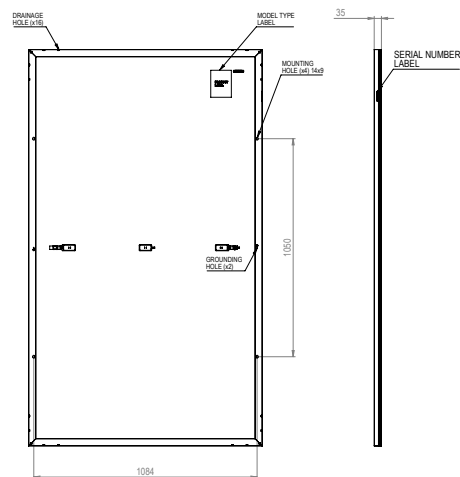
Temperature range	[°C]	-40 to +85
Maximum system voltage	[V]	1500
Max. series fuse rating	[A]	25
Limiting reverse current	[A]	20
Maximum surface load capacity	[Pa]	Down: 5400*
		Up: 2400
Resistance against hail		Max. diameter of 25 mm with impact speed 23 m/s

THERMAL CHARACTERISTICS

Temperature coefficient of P_{MPP}	[%/K]	-0,322
Temperature coefficient of I_{SC}	[%/K]	0,033
Temperature coefficient of V_{OC}	[%/K]	-0,22

PACKAGING:

Quantity/Pallet	pcs	31
Truck	pcs	806
Pallets	pcs	26



*Please refer to installation manual

