

SESE 48- 156M

Electrical characteristics

Typical power P _{max} (STC)*	190 Wp
Tolerance	+/- 3%
Max power voltage V _{pm}	24,10 V
Max power current I _{pm}	8,00 A
Leerlaufspannung U _{oc}	29,30 V
Kurzschlussstrom I _{sc}	8,60 A
Temperature coefficient	
- Open circuit voltage	- 90,56 mV/K
- Short circuit current	2,22 mA/K
- Nominal power	-0,43 %/K

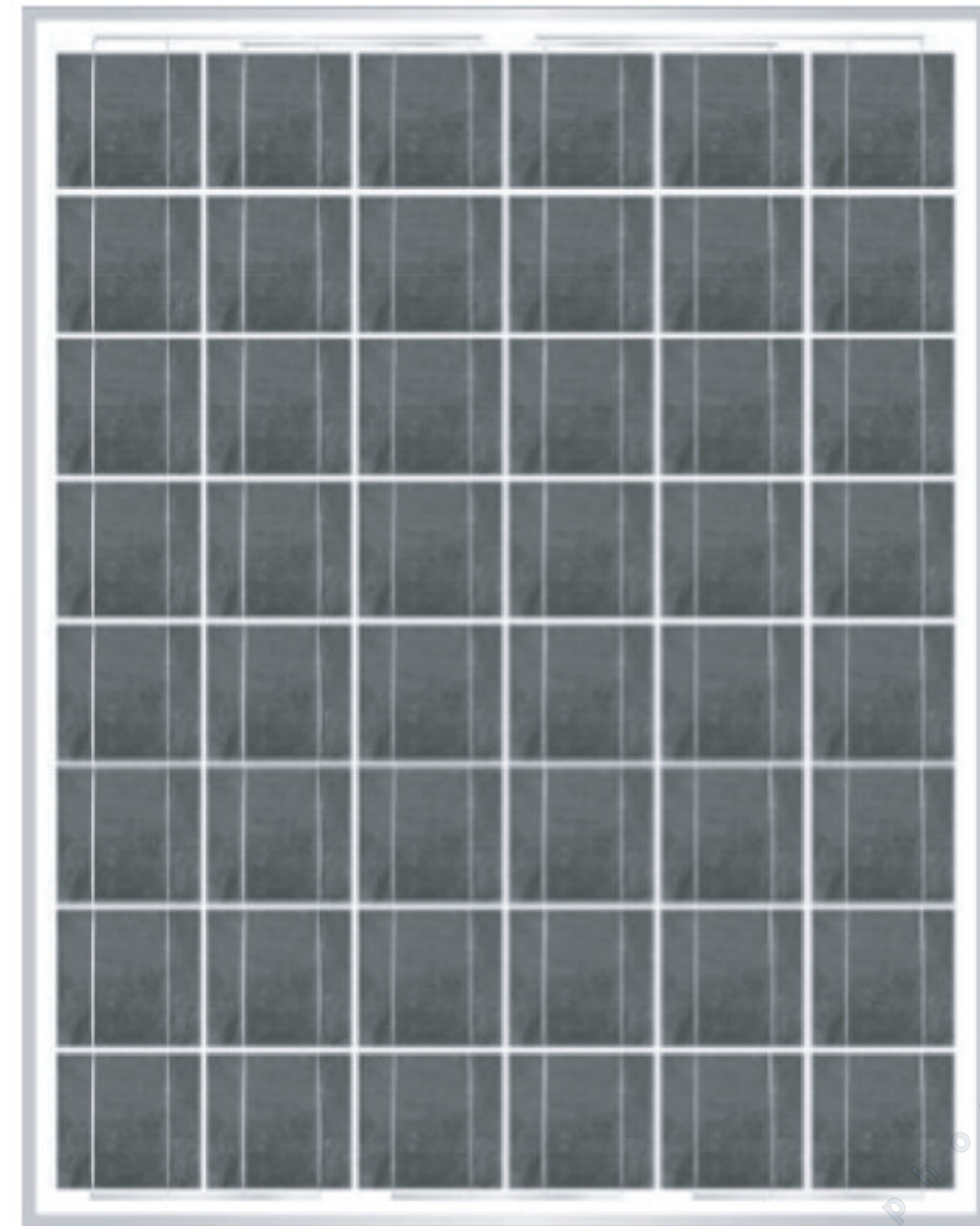
Max. system voltage	1000 V
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Dimensions

Length	1334 mm
Width	994 mm
Frame	40 mm
Weight	17 kg
Front glass	3.2 mm
Encapsulation	EVA
Back side	Tedlar
Output terminal	MC-Connectors
Cable	(4 mm ²) und 95 cm Länge

Operating conditions

Ambient temperature	-40 bis +85°C
Hail resistance	28 mm
Surface load	50 kg/m ²



Typical power classes: 180 Wp, 185 Wp, 190 Wp, 195 Wp, 200 Wp

Other products: SESE 60-156 M, 220-240 Wp, mono crystalline, 60 cells
SESE 60-156 P, 205-225 Wp, multi crystalline, 60 cells

Cell manufacturer: Bosch Solar Energy AG, Germany
Cell type: E6+ Blue Power, multi crystalline and mono crystalline 48 cells
Module manufacturer: Shanghai Electric Solar Energy Co., LTD., Shanghai, P.R. China

Product warranty: 5 years
Efficiency warranty: 90 % at 10 years, 80 % at 25 years (see warranty conditions)
Certificate: TÜV Rheinland, IEC 61215, SK II, IEC 61730, RoHS, CE, ISO 9001, ISO 14001

* STC - Standard Test Conditions (25°C, 1,000 W/m², AM 1.5)

** Technical data are subject to change without prior notice. All electrical data are derived from average module measurements subject to deviations.

*** Drawings and pictures are not true to scale. On request we will submit scaled drawings.

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SESE 48- 156M

Electrical characteristic

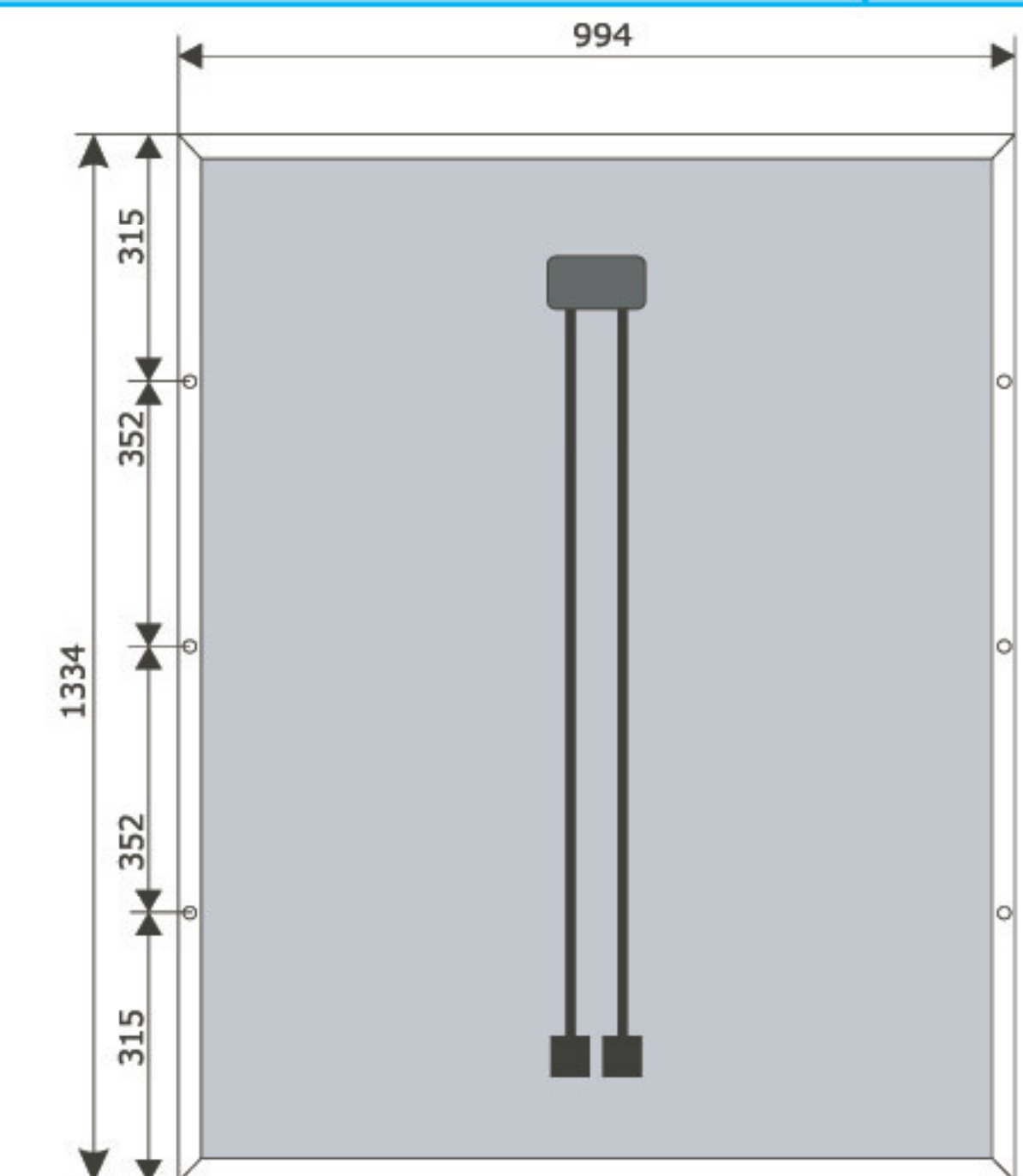
	M180	M185	M190	M195	M200
Typical Power P _{max} (STC)	180 Wp	185 Wp	195 Wp	195 Wp	200 Wp
Leistungstoleranz	+/- 2.5 Wp	+/- 2.5 Wp	+/- 2.5 Wp	+/- 2.5 Wp	+/- 2.5 Wp
Max power voltage V _{pm}	23,40 V	23,54 V	24,10 V	24,24 V	24,50 V
Max power current I _{pm}	7,90 A	7,91 A	8,00 A	8,05 A	8,14 A
Open circuit voltage Voc	28,90 V	29,11 V	29,30 V	29,35 V	29,57 V
Closed circuit current I _{sc}	8,50 A	8,64 A	8,60 A	8,75 A	8,87 A
Temperature coefficient					
- Open circuit voltage	-89,38 mV/K	-89,92 mV/K	-90,56 mV/K	-91,58 mV/K	-92,80 mV/K
- Short circuit current	2,11 mA/K	2,17 mA/K	2,28 mA/K	2,28 mA/K	2,34 mA/K
- Nominal power	-0,43 %/K	-0,43 %/K	-0,43 %/K	-0,43 %/K	-0,43 %/K
Max. system voltage _{max}	1000 V	1000 V	1000 V	1000 V	1000 V

Dimensions

Length	1334 mm
Width	994 mm
Frame	40 mm
Weight	17 kg
Front glass	3.2 mm
Encapsulation	EVA
Back side	Tedlar
Connection terminal	MC-Connectors
Cable	(4 mm ²) und 95 cm Länge

Technical data are subject to change without prior notice. All electrical data are derived from average module measurements and subject to deviations.

For any further information please refer to:



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