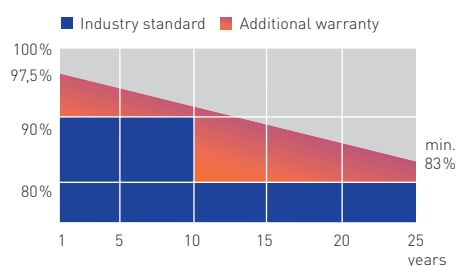


JONSOL
JSM120
440-460W
MONO



The high quality and reliability of JONSOL are based on many years of production and industry experience, a mature module design and the automatic production process. The result is guaranteed high-performance JONSOL modules.

The monocrystalline JONSOL module of the Half Cell Series consists of 120 half cells. It delivers high power ratings and higher levels of efficiency and is therefore particularly suitable for limited areas and roof installations. The partial shading yield is increased thanks to the half cells.



JONSOL quality features JSM120 182

- Module efficiency up to 21.26 percent
- Monocrystalline high-performance solar cells
- Structured special glass
- Fully automatic production lines
- Certification according to IEC 61215, EN IEC 61730
- Comprehensive quality controls
- 100 % electroluminescence test
- IP67 junction box for safety and long-term weather resistance
- Plus sorting up to 3 percent for a higher yield at the same price

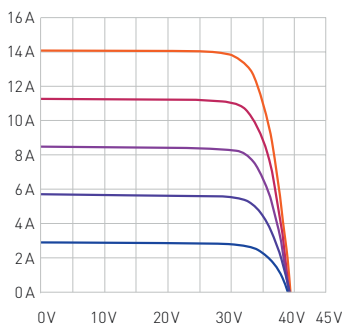
*Linear performance guarantee

JONSOL

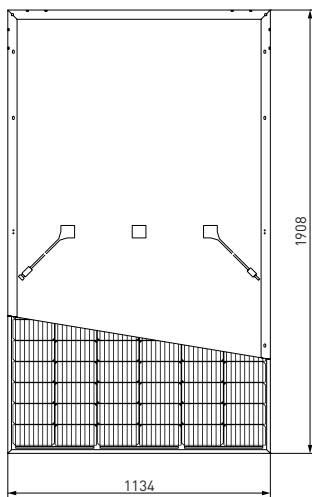
JSM120

440-460W

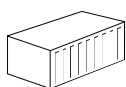
MONO



■ 1000 W/m² ■ 600 W/m² ■ 200 W/m²
■ 800 W/m² ■ 400 W/m²



Modules per pallet:
31 pcs.



Paletts // modules per container:
24 pcs. // 744 pcs.

Technical data (STC)

Nominal power (Pmax)	440 W	445 W	450 W	455 W	460 W
Nominal voltage (Vmp)	33.72 V	33.82 V	33.91 V	34.06 V	34.20 V
Nominal current (Imp)	13.05 A	13.16 A	13.27 A	13.36 A	13.45 A
Open circuit voltage (Voc)	41.02 V	41.10 V	41.18 V	41.33 V	41.48 V
Short-circuit current (Isc)	13.73 A	13.79 A	13.85 A	13.93 A	14.01 A
Efficiency	20.34 %	20.57 %	20.80 %	21.03 %	21.26 %

Permitted operating temperature -40°C - +85°C

Maximum system voltage 1500 V

Protection class II

Fire Safety Class (UL) A

Reverse Current Capability (I_R) 25 A

Power tolerance (W) 0 - +3 %

Measurement tolerances P_{mp} ± 3 %, I_{sc} & U_{oc} ± 3 % at STC: 1000 W/m², 25 ± 2 °C, AM 1.5 according to IEC 60904-3 // NMOT: 800 W/m², AM 1.5

Technical data (NMOT)

Nominal power (Pmax)	328 W	331 W	335 W	339 W	342 W
Nominal voltage (Vmp)	31.36 V	31.45 V	31.54 V	31.68 V	31.81 V
Nominal current (Imp)	10.44 A	10.53 A	10.62 A	10.69 A	10.76 A
Open circuit voltage (Voc)	38.72 V	38.80 V	38.87 V	39.02 V	39.16 V
Short-circuit current (Isc)	11.08 A	11.13 A	11.18 A	11.24 A	11.31 A

Temperature coefficient (STC)

Temperature coefficient (Pmax) -0.35 %/K

Temperature coefficient (Voc) -0.27 %/K

Temperature coefficient (Isc) 0.048 %/K

Standard temperature at normal operating conditions (NOCT) 43 +/-2°C

Mechanical data

Cell Type	monocrystalline, 120 half cells 182 x 91 mm
Module size (L x B x H)	1908 x 1134 x 35 mm
Weight	23.5 kg
Front cover	Solar glass 3,2 mm, tempered, AR coated
Back cover	Composite film
Frame	anodized aluminum alloy
Junction Box	IP68, 3 diodes
Cable	4 mm ² , ≥ 1 m, IP68
Connector	MC4 compatible, IP68
max. mechanical load	Tensile load: 2400 Pa, Pressure load: 5400 Pa

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