

Creating a Powerful Future

Mono S4 Halfcut | Trend Black

435 W / 440 W / 445 W

The power module for the residential and commercial sector makes optimum use of the 2 square metre limit. The transparent glass at the front and rear with a white print between the cells makes the module a visual highlight. Double glass module with bifacial monocrystalline N-Type/TOPCon half cells.

Especially suitable for:



Residential



Commercial



German warranty

30-year guarantee on the product and 30 years on the module performance



Hail protection class 5

Resistant to ice balls with a maximum diameter of 50 mm and a speed of 32.2 m/s



Fire protection glass A

Best possible fire protection certification for solar modules with German TÜV certificate.



Area utilisation factor

223 W/m² at 445 W. Better comparability through watt output per square metre



Transparent

Transparent double glass solar module





Bifacial cell

Transparent cell with additional energy on the back of the cell



N-type technology

TopCon solar module with N-Type technology for even more peak performance



Half-cell module

Two-part cell for more efficiency, more safety and more reliability



Low-light behaviour

Outstanding performance even under low light conditions



Glass cover

Resistant to ammonia & salt spray Highly transparent, self-cleaning glass



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Electrical data under STC (Standard Test Conditions: 1000 W/m², 25 °C, AM 1.5)					
Rated power	P_{max}	435 W	440 W	445 W	
Sorting limits of performance		0/+5 W	0/+5 W	0/+5 W	
Voltage	U_{MPP}	32.22 V	32.49 V	32.80 V	
Open circuit voltage	U _{oc}	37.75 V	38.07 V	38.29 V	
Current	I _{MPP}	13.50 A	13.54 A	13.56 A	
Short-circuit current	I _{sc}	14.32 A	14.33 A	14.39 A	
Efficiency		21.77 %	22.02 %	22.27 %	

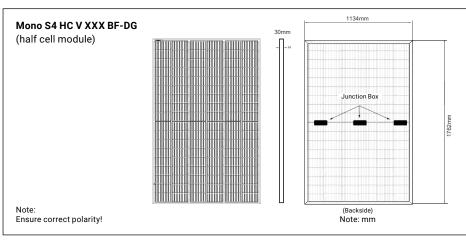
Temperature data		
Operating temperature		– 40° C bis + 85° C
Nominal operating cell temperature		43° C ± 2° C
Power temperature coefficient	$T_{K}(P_{MPP})$	- 0.300 %/°C
Voltage temperature coefficient	$T_{K}(U_{oc})$	− 0.280 %/°C
Current temperature coefficient	T _K (I _{SC})	0.040 %/°C

Further information		
Number of cells	108 N-Type bifacial monocrystalline half cells (6 x 18)	
Cell size	182 x 186.75 mm	
Module dimensions	1762 x 1134 x 30 mm	
Type of Frame	black anodized aluminium alloy	
Max. system voltage	1500 V	
Reverse current loading capability	30 A	
Glass thickness	Frontside/Backside: 2.0 mm/2.0 mm	
Weight	approx. 25.9 kg	
Module connection	MC4 or similar, 4.0 mm², cable length: (+) ≥ 1200 mm, (-) ≥ 1200 mm	
Junction box rating	IP68	
Allowable Hail Load	50 mm iceball with velocity of 32.2 m/s	
Snow load	5400 Pa ≜ 550 kg/m ²	
Fire class	A according to IEC standard 61730-2 (UL 790, UL 1703)	

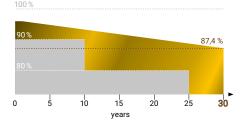
30 years product warranty, 30 years linear performance warranty according to our additional warranty conditions for solar power modules of the "Mono S4 Halfcut Trend Black" product series, which we will gladly send you.

Due to the tolerance of the anti-reflective coating, colour differences in the solar modules may occur.

Subject to technical modifications with corresponding follow-up certifications. Errors excepted. Illustration similar.



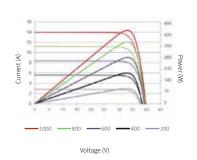
Logistic		
Dimension pallet (L/W/H)	180/114/125 cm	
Weight pallet	ca. 962 kg	
Modules per pallet	36	
Modules per truck	1008	
Modules per Container [40' HC]	936	



Linear performance warranty for Double-Glas Solar Modules

Standard tiered warranty

Module performance















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