

### Creating a Powerful Future

# Mono S4 Halfcut | Black-White 405 W / 410 W / 415 W

The Solar Fabrik Mono S4 Halfcut module with a max. system voltage of 1500V is monocrystalline and available in the 405 W, 410 W and 415 W power classes.

- Half cell modules High efficiency, high safety, high reliability
- + Highly transparent self-cleaning glass
- + High performance under low light conditions
- + Resistant to environmental influences: Passed salt mist & ammonia test
- + Multibusbar-technology
- + Area utilization 212.52 W/m<sup>2</sup> at 415 W
- + German warranty

BloombergNEF (22/2023)

By separating the cells into two equal parts (half-cut technology), the module achieves a higher output than a full-cell module. The current flow in the cell is halved and the power loss is thus reduced. Due to the changed cell arrangement, the Mono S4 Halfcut module offers further advantages. On the one hand, the improved low-light behaviour and, on the other hand, the behaviour in the case of shading. If a full-cell module no longer produces any power when shaded, the Solar Fabrik Mono S4 Halfcut can still achieve up to 50% power.

The multibusbar technology enables even higher performance, higher reliability and higher (electrical) stress capacity of the modules.



SOLAR 2



## Creating a Powerful Future

# Mono S4 Halfcut | Black-White

405 W / 410 W / 415 W

#### Electrical data under STC (Standard Test Conditions: 1000 W/m², 25 °C, AM 1.5)

Rated power	P <sub>max</sub>	405W	410 W	415 W
Sorting limits of performance		0/+3 %	0/+3 %	0/+3 %
Voltage	U <sub>MPP</sub>	30.91 V	31.09 V	31.27 V
Open circuit voltage	U <sub>oc</sub>	37.21 V	37.33 V	37.45 V
Current	I <sub>MPP</sub>	13.11 A	13.20 A	13.29 A
Short-circuit current	I <sub>sc</sub>	13.98 A	14.06 A	14.13 A
Efficiency		20.91 %	21.17 %	21.43 %

#### Temperature data

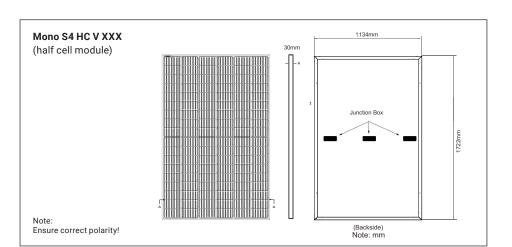
•			
Operating temperature		– 40° C ~ + 85° C	
Nominal operating cell temperature		42° C ± 3° C	
Power temperature coefficient	T <sub>K</sub> (P <sub>MPP</sub> )	- 0.330 %/°C	
Voltage temperature coefficient	T <sub>K</sub> (U <sub>oc</sub> )	- 0.246%/°C	
Current temperature coefficient	T <sub>K</sub> (I <sub>SC</sub> )	0.0448 %/°C	

#### **Further information**

Further information	Mea	
Number of cells	108 monocrystalline half cells (6 x 18)	
Size of cell	182 x 91 mm	
Module dimensions	1722 x 1134 x 30 mm	
Type of Frame	Anodized aluminium alloy	
Max. system voltage	1500 V	
Reverse current loading capability	25 A	
Glass thickness	3.2 mm	
Weight	approx. 21.2 kg	
Module connection	MC4 or similar, 4.0 mm², cable length: (+) ≥ 1200 mm, (-) ≥ 1200 mm	
Junction box rating	IP68	
Allowable Hail Load	25 mm iceball with velocity of 23 m/s	
Snow load	5400 Pa ≙ 550 kg/m²	

15-year product warranty, 25-year linear performance warranty according to our additional warranty conditions for solar power modules of the "Mono S4" 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.

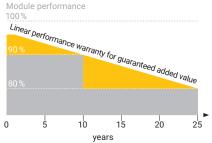




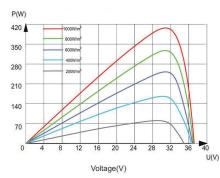
#### Logistic

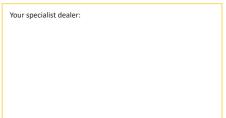
177/114/125 cm	
approx. 793 kg	
36	
1008	
936	





Linear performance warranty Standard tiered warranty





#### Solar Fabrik GmbH

Hermann-Niggemann-Str. 7-9 63846 Laufach Germany

+49 (0)6093 20770-0 info@solar-fabrik.de www.solar-fabrik.de