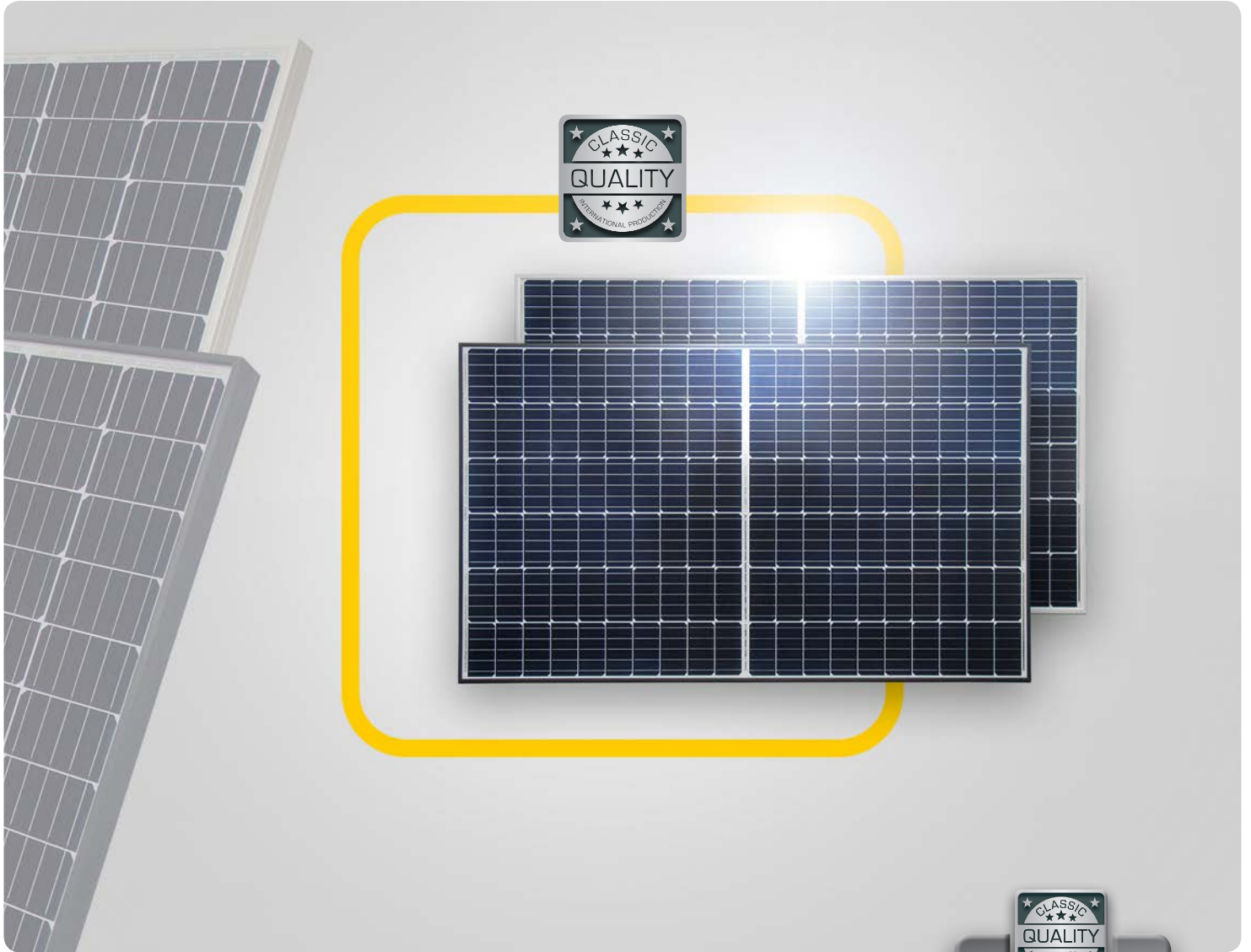




## Solar Modules MONOCRYSTALLINE



### M Series Halfcut

320 W ▪ 325 W ▪ 330 W

- Half cell modules
- High efficiency, high safety, high reliability
- High performance under low light conditions
- 5-busbar-technology
- PID Free
- German warranty



# M Series Halfcut

## Electrical data under STC (Standard Test Conditions: 1000 W/m<sup>2</sup>, 25 °C, AM 1.5)

| Parameter                     | Symbol    | 320 W   | 325 W   | 330 W   |
|-------------------------------|-----------|---------|---------|---------|
| Rated power                   | $P_{max}$ | 320 W   | 325 W   | 330 W   |
| Sorting limits of performance |           | 0/+3 %  | 0/+3 %  | 0/+3 %  |
| Voltage                       | $U_{MPP}$ | 33.83 V | 33.97 V | 34,10 V |
| Open circuit voltage          | $U_{OC}$  | 40.35 V | 40.58 V | 40,80 V |
| Current                       | $I_{MPP}$ | 9.46 A  | 9.57 A  | 9,68 A  |
| Short-circuit current         | $I_{SC}$  | 9.94 A  | 10.03 A | 10,13 A |
| Efficiency                    |           | 19.30 % | 19.60 % | 19,90 % |

## Temperature data

|                                 |                |                   |
|---------------------------------|----------------|-------------------|
| Operating temperature           |                | - 40° C ~ + 85° C |
| Operating humidity              |                | 5 ~ 85 %          |
| Power temperature coefficient   | $T_k(P_{MPP})$ | -0,370 %/K        |
| Voltage temperature coefficient | $T_k(U_{OC})$  | -0,295 %/K        |
| Current temperature coefficient | $T_k(I_{SC})$  | 0,039 %/K         |

## Further information

|                                    |   |
|------------------------------------|---|
| Number of cells                    | 120 monocrystalline half cells (6 x 20)   |
| Module dimensions                  | 1674 x 990 x 35 mm  |
| Max. system voltage                | 1000 V  |
| Reverse current loading capability | 15 A  |
| Glass thickness                    | 3.2 mm  |
| Weight                             | 18.8 kg   |
| Module connection                  | MC4 compatible, PV1-F, 4.0 mm <sup>2</sup> , cable length: (+) ≥ 1200 mm, (-) ≥ 1200 mm |
| Junction box rating                | IP67  |
| Allowable Hail Load                | 25 mm iceball with velocity of 23 m/s   |
| Snow load                          | 5400 Pa $\hat{=}$ 550 kg/m <sup>2</sup>   |

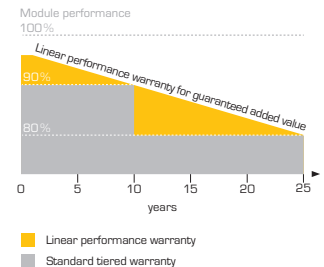
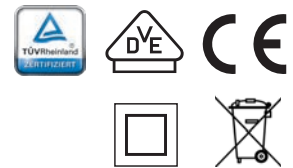
12-year product warranty, 25-year linear performance warranty according to our additional warranty conditions for solar power modules of the "M" product series, which we will gladly send you.

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

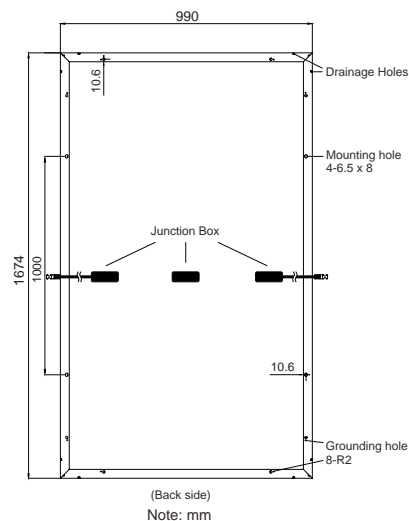
## Packaging Specifications

| Truck              |                |
|--------------------|----------------|
| Weight pallet      | approx. 585 kg |
| Modules per pallet | 30             |
| Modules per truck  | 840            |

| Shipment                       |                |
|--------------------------------|----------------|
| Weight pallet                  | approx. 585 kg |
| Modules per pallet             | 30             |
| Modules per container [40' HC] | 780            |



### M Series Halfcut (half cell module)



**Note:**  
Ensure correct polarity!

Your specialist dealer:

**SF Solar Fabrik GmbH & Co. KG**  
Im Gewerbegebiet 12  
63831 Wiesen  
Germany

Phone: +49 (0)6096 9 700-790  
Fax: +49 (0)6096 9 700-728  
Mail: info@solar-fabrik.de  
Web: www.solar-fabrik.de