# **BAUER**

Solartechnik GmbH

BS-144M10H 540 - 550 W



#### PERFORMANCE GUARANTEE

20 years of product warranty and a linear performance guarantee over a period of 25 years



#### **CERTIFICATION**

Permanent in-house quality control, multiple certifications by accredited inspection bodies



#### **EFFICIENCY**

High efficiency for optimum yield - innovations directly influence the production process



# **POSITIVE POWER TOLERANCE**

Exclusive delivery of solar modules with positive power tolerance only



# PERC HALF-CELL TECHNOLOGY

Double the amount of cells on the same surface area reduces power loss in case of e.g. shadowing



## **WEATHERPROOF**

Standardized mechanical load test guards against damage from wind and weather



#### **GERMAN GUARANTOR**

In case of need it is ensured that a German company assumes the claim settlement



## **SAFETY**

High-quality components ensure maximum protection in all weather conditions



#### **PID TEST**

The solar cells of our high performance modules are tested for PID



#### **REINSURANCE COVERAGE**

The cooperation with the insurance company is guaranteeing even higher levels of financial stability & reliability - BAUER is insured for 12 years of the product's warranty and 25 years of the product's perfomance guarantee



PROVEN & GUARANTEED BY

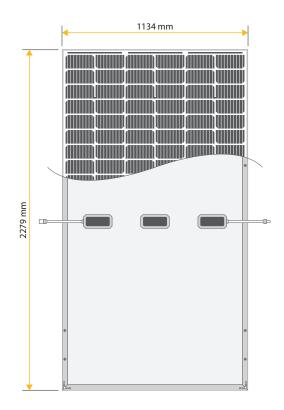
BAUER SOLARTECHNIK

HIGH QUALITY STANDARDS BY GERMAN ENGINEERS

## **BS-144M10H** 540 - 550 W

| MECHANICAL DATA    |   |
|--------------------|---|
| Module dimensions  | 2279 x 1134 x 35 mm                           |
| Weight             | 29,0 kg                                       |
| Frame              | anodized aluminium alloy (silver)             |
| Frontside          | Glass with anti-reflection technology         |
| Embedding material | EVA   |
| Backside           | Foil (white)                                  |
| Solar cells        | 144 monocrystalline PERC half-cells           |
| Connection         | IP ≥ 67, 3 bypass diodes                      |
| Cable & connector  | 1x4 mm <sup>2</sup> , 1300 mm, MC4 compatible |

| OPERATIONAL CONDITIONS |                     |  |
|------------------------|---------------------|--|
| Operating temperature  | -40 to 85°C         |  |
| Static load            | 5400 Pa (snow/wind) |  |
| Hail                   | Ø 25 mm at 23 m/s   |  |



| ELECTRICAL DATA <sup>1</sup>                |                                    | BS-540-144M10H | BS-545-144M10H | BS-550-144M10H |
|---|------------------------------------|----------------|----------------|----------------|
| Maximum power                               | P <sub>max</sub> (W)               | 540            | 545            | 550            |
| Power output tolerance                      | P <sub>max</sub> (%)               | 0 ~ +3         | 0 ~ +3         | 0 ~ +3         |
| Open circuit voltage                        | Voc (V)                            | 49,77          | 49,89          | 50,01          |
| Short circuit current                       | I <sub>sc</sub> (A)                | 13,68          | 13,75          | 13,82          |
| Voltage at max. power                       | $V_{mpp}(V)$                       | 40,69          | 40,85          | 41,01          |
| Current at max. power                       | Impp (A)                           | 13,28          | 13,35          | 13,42          |
| Module efficiency                           | η <sub>m</sub> (%)                 | 20,89          | 21,09          | 21,28          |
| Nominal operating cell temperature          | NOCT (°C)                          |                | 42 ± 2         |                |
| Temperature coefficient of $V_{\text{oc}}$  | T <sub>k</sub> (V <sub>oc</sub> )  |                | -0,270 %/°C    |                |
| Temperature coefficient of Isc              | T <sub>k</sub> (I <sub>sc</sub> )  | +0,038 %/°C    |                |                |
| Temperature coefficient of P <sub>mpp</sub> | T <sub>k</sub> (P <sub>mpp</sub> ) | -0,365 %/°C    |                |                |
| Maximum system voltage DC (TÜV)             | (V)                                |                | 1000/1500 DC   |                |
| Maximum series fuse rating                  | (A)                                |                | 25             |                |



| WARRANTY CONDITIONS <sup>2</sup> |                                    |  |
|----------------------------------|------------------------------------|--|
| Product warranty                 | 20 years                           |  |
| Performance guarantee            | 25 years (min. 80% after 25 years) |  |

| IEC 61215            |  |
|----------------------|--|
| IEC 61730            |  |
|                      |  |
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| PACKAGING UNITS    |         |  |
|--------------------|---------|--|
| Modules per pallet | 31 pcs  |  |
| Modules per truck  | 620 pcs |  |

1 Values under Standard Test Conditions (STC): air mass 1,5 AM, irradiance 1000 W/m², cell temperature 25°C. STC measuring tolerance: ±3 % (Pmax),  $\pm 10\,\% \, (Vmax, Impp, VOC, ISC). \, ^2 Nominal \, value \, is \, specified \, in \, the \, written \, warranty \, conditions. \, A \, possible \, light-induced \, degradation \, in \, power \, is \, not \, taken \, (Vmax, Impp, VOC, ISC). \, ^2 Nominal \, value \, is \, specified \, in \, the \, written \, warranty \, conditions. \, A \, possible \, light-induced \, degradation \, in \, power \, is \, not \, taken \, (Vmax, Impp, VOC, ISC). \, ^2 Nominal \, value \, is \, specified \, in \, the \, written \, warranty \, conditions. \, A \, possible \, light-induced \, degradation \, in \, power \, is \, not \, taken \, (Vmax, Impp, VOC, ISC). \, ^2 Nominal \, value \, is \, specified \, in \, the \, written \, warranty \, conditions. \, A \, possible \, light-induced \, degradation \, in \, power \, is \, not \, taken \, (Vmax, Impp, VOC, ISC). \, ^2 Nominal \, value \, is \, specified \, in \, the \, written \, (Vmax, Impp, VOC, ISC). \, ^2 Nominal \, value \, is \, specified \, in \, the \, written \, (Vmax, Impp, VOC, ISC). \, ^2 Nominal \, value \, (Vmax, Impp, VOC, ISC). \, ^2 Nominal \, (Vmax, Impp, VOC,$  $into \ account. The \ beneficiary \ under the \ reinsurance \ policy \ of \ Munich Re \ is \ solely \ Bauer \ Energiekonzepte \ GmbH. \ Please \ contact \ us \ to \ get \ information \ on \ the \ policy \ formation \ on \ policy \ formation \ on \ policy \ formation \ formation \ on \ policy \ formation \ formation$ how this insurance coverage benefits you as a customer. Note: Please read safety instructions and installation manual before using this product. Subject to change. © 2020 Bauer Energiekonzepte GmbH. Effective 1st of june 2021.

Fax:



