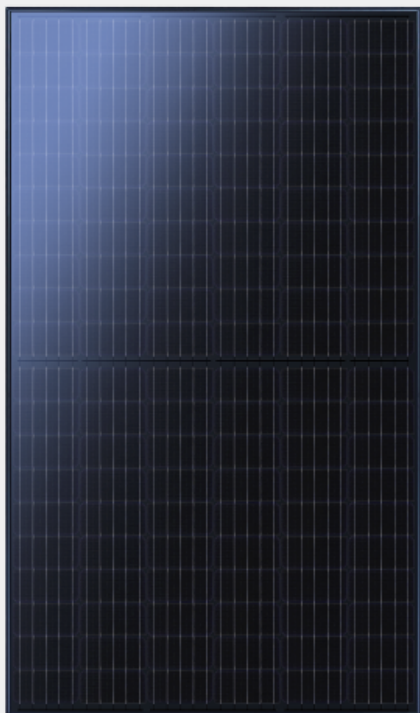


## Half cut Mono crystalline Solar Module

ESM 315/320/325/330/335/340HB

### Cechy Modułu

- Dodatnia tolerancja mocy do 5 W
- Wysoka odporność na śniegiem 5400 Pa i wiatr do 4800 Pa
- IP68 - skrzynka montażowa długotrwale wytrzymała na warunki atmosferyczne
- Odporność na mgłę solną, amoniak i piasek. Możliwość stosowania na terenach nadmorskich i rolniczych
- Selektywny wybór materiałów i precyzyjny proces kontroli Potential Induced Degradation (PID)
- Pełna kontrola jakości i identyfikowalności materiałów Shop Floor Control (SFC)
- Wysokiej jakości szyba AR, czarna ramka i tył modułu
- Zastosowane ogniwa krzemowe LONGI PERC klasa A

### GWARANCJA

- 12 lat gwarancji produktowej
- 12 lat minimum 92% Power Output
- 30 lat minimum 83% Power Output

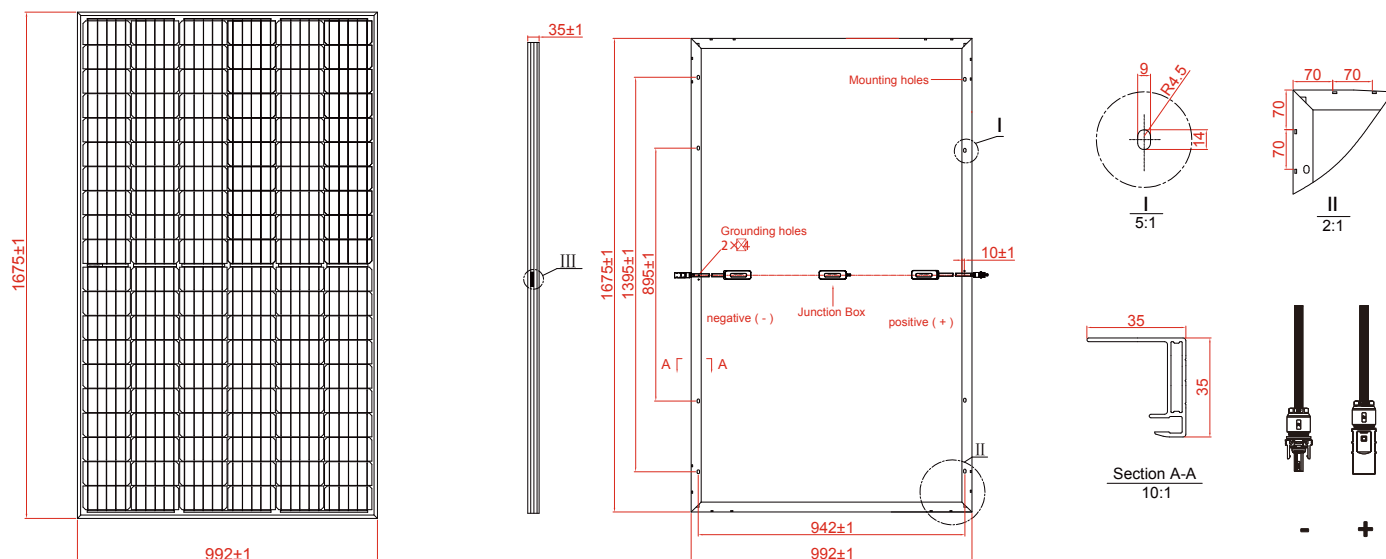
# Half cut Mono crystalline Solar Module

ESM 315/320/325/330/335/340HB

**Zinno Solarline**

**Poland**

*invented for solar*



## PARAMETRY ELEKTRYCZNE

| Model Type                  | Unit | ESM 315HB               | ESM 320HB | ESM 325HB | ESM 330HB | ESM 335HB | ESM 340HB |
|-----------------------------|------|-------------------------|-----------|-----------|-----------|-----------|-----------|
| Maximum Power (Pmax)        | W    | 315                     | 320       | 325       | 330       | 335       | 340       |
| Module Efficiency           | %    | 19.0                    | 19.3      | 19.6      | 19.9      | 20.2      | 20.5      |
| Open Circuit Voltage (Voc)  | V    | 40.15                   | 40.20     | 40.25     | 40.30     | 40.35     | 40.40     |
| Short Circuit Current (Isc) | A    | 10.00                   | 10.14     | 10.28     | 10.42     | 10.56     | 10.70     |
| Maximum Power Voltage (Vmp) | V    | 33.18                   | 33.26     | 33.34     | 33.43     | 33.51     | 33.59     |
| Maximum Power Current (Imp) | A    | 9.49                    | 9.62      | 9.75      | 9.87      | 10.00     | 10.12     |
| Maximum System Voltage      | V    | ICE 1000VDC/UL1500(VDC) |           |           |           |           |           |
| Maximum Series Fuse Rating  | A    | 18                      |           |           |           |           |           |

Standard Test Conditions (STC) of irradiance of 1000 W/m<sup>2</sup>, spectrum AM 1.5 and cell temperature of 25°C.

The NOCT is obtained under the Test Conditions: 800W/m<sup>2</sup>, 20°C ambient temperature, AM 1.5 Spectrum, 1m/s wind speed.

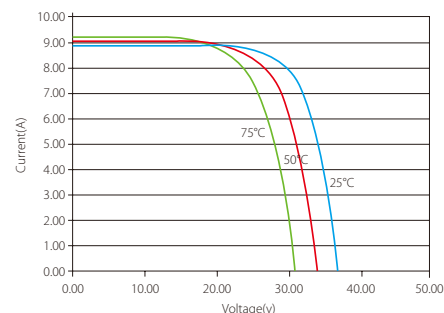
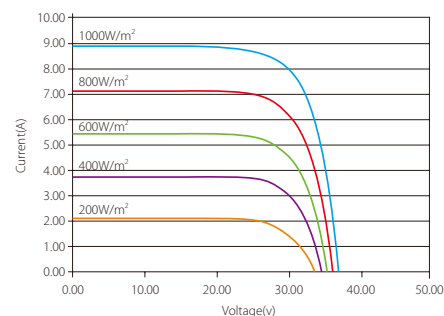
## PARAMETRY TECHNICZNE

|                                  |                            |
|----------------------------------|----------------------------|
| Module Dimension (mm)            | 1675× 992× 35              |
| Cell Dimension (mm)              | 156.75 x 78.375            |
| Number of Cell                   | 120                        |
| Weight (kgs)                     | 19kg                       |
| Maximum Load (TUV) (Pascal)      | 5400                       |
| Junction Box and Cable connector | IP68 rated; MC4 compatible |
| Back-sheet Color                 | White or Black             |
| Frame Color                      | Silver or Black            |

## WSPÓŁCZYNNIKI TEMPERATUROWE

|                                           |              |
|-------------------------------------------|--------------|
| Nominal Operating Cell Temperature (NOCT) | 45 +/- 2 °C  |
| Temperature Coefficient ( Pmax)           | -0.367% / °C |
| Temperature Coefficient ( Voc )           | -0.320% / °C |
| Temperature Coefficient ( Isc )           | 0.107% / °C  |
| Operating Temperature                     | -40~85 °C    |

### CHARAKTERYSTYKA PRĄDOWO-NAPIĘCIOWA



The specifications are subject to change without prior notice.