



# SOLID series

# Semi-Clear Frameless

 455 W

 Made in the EU

3.2+3.2 mm glass



Fire class A



10 500 Pa  
Extreme load resistance



NH<sub>3</sub>  
Ammonia resistance



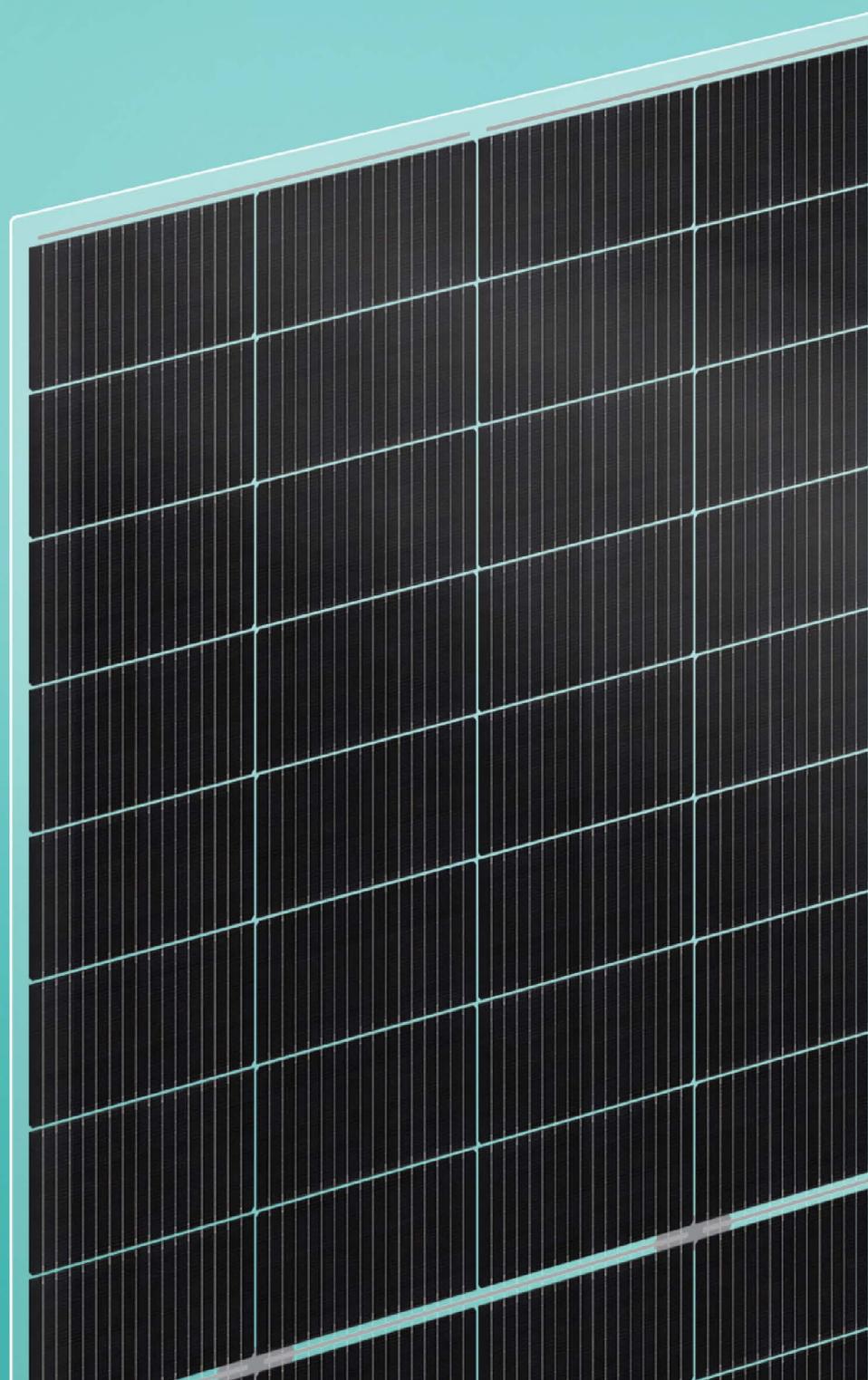
40 mm  
Hail resistance class 4



98 %  
recyclable



35 %  
of recycled glass content



**30** Product & Efficiency Guarantee  
YEAR

**90%** POWER WARRANTY



THE FIRST AND ONLY  
IN THE WORLD

Deutsches Institut für Bautechnik



ONE OF A FEW IN THE WORLD

### Electrical data (STC\*)

|                                      |                           |
|--------------------------------------|---------------------------|
| Maximum power (W)                    | 455                       |
| Cell technology                      | N type, TOPCon - bifacial |
| Open circuit voltage ( $V_{oc}/V$ )  | 34,82                     |
| Short circuit current ( $I_{sc}/A$ ) | 15,97                     |
| Max power voltage ( $V_{mpp}/V$ )    | 29,71                     |
| Max power current ( $I_{mp}/A$ )     | 15,31                     |
| Module efficiency ( $\eta$ )         | 22,57 %                   |
| Max system voltage (V)               | 1500                      |
| Max current (A)                      | 30                        |
| Power tolerance                      | 0/+5W                     |

\*Under standard test conditions (STC) of irradiance of 1000W/sq.m., spectrum AM1.5 and cell temperature of 25°C. Flash testing measurement accuracy of +/-5%.

### Warranty

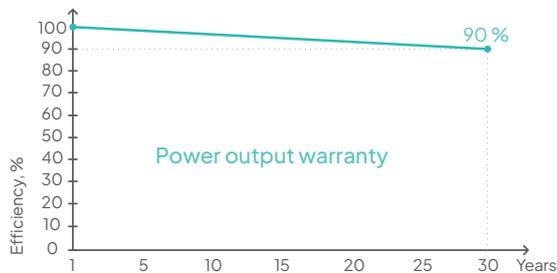
30 years product warranty

30 years efficiency warranty

First year degradation (%) 1

Annual degradation (%) 0,31

Power in year 30 (%) 90



### Certifications

IEC 61215:2021; IEC 61730:2023

|                        |   |
|------------------------|---|
| Cradle to Cradle (C2C) | Gold level  |
| abZ/aBG                | National technical approval / General construction permit |
| IEC 62716:2013         | Ammonia corrosion testing                                 |
| IEC 61701:2020         | Salt mist corrosion testing                               |
| IEC 61215-2:2021       | 40 mm hailstone - Hail resistance class 4 (HW4)           |
| ISO 9001:2015          | Quality management systems                                |
| ISO 14001:2015         | Environmental management systems                          |
| ISO 45001:2018         | Occupational health and safety                            |
| SundaHus               | A level assessment  |

Produced using 100% renewable energy

Membership at Svensk Solenergi



Product assessed in SundaHus Material Data



PRODUCED USING 100% RENEWABLE ENERGY



Svensk Solenergi

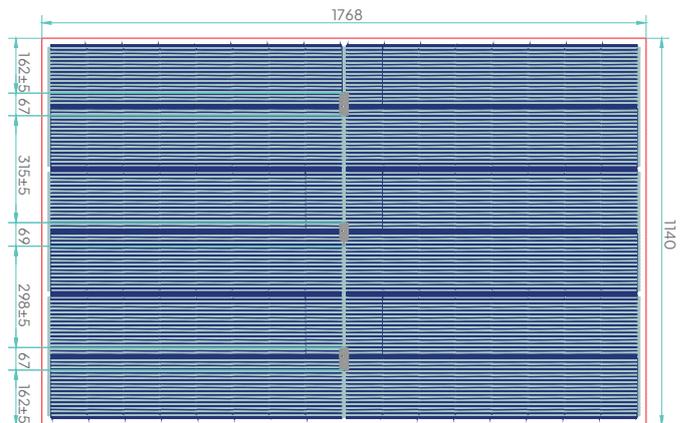


### Temperature ratings

|  |              |
|--|--------------|
| Current temperature coefficient ( $\alpha$ ) | +0,045% / °C |
| Voltage temperature coefficient ( $\beta$ )  | -0,250% / °C |
| Power temperature coefficient ( $\delta$ )   | -0,300% / °C |
| Nominal operating module temperature         | 46 °C        |

### Mechanical data

|   |   |
|---|---|
| Dimensions (LxWxH) (mm)                     | 1768x1140x7.2   |
| Dimensions with edge sealing (LxWxH) (mm)   | 1772±2x1144±2x7.2                                     |
| Weight (kg)                                 | 33  |
| Front glass (mm)                            | 3.2, structured, low reflection, with AR coating, TVG |
| Back glass (mm)                             | 3.2, transparent, TVG                                 |
| Cell Size (mm)                              | 182,2x105   |
| Busbars                                     | 16  |
| Cell configuration                          | 6x16  |
| Frame                                       | Frameless   |
| Rated operating altitude (m)                | Up to 2000  |
| Operating temperature (°C)                  | -40 ÷ +85   |
| Maximum test load (wind/snow) (Pa)          | 5400/10500  |
| Junction box / IP class                     | Split junction box / IP68                             |
| Cable cross section size (mm <sup>2</sup> ) | 4   |
| Cable length (m)                            | 1,2   |
| Bypass diodes                               | 3   |
| Connector                                   | MC4-EVO2  |



### Packing information

|                                     |                |
|-------------------------------------|----------------|
| Modules per pallet (pcs)            | 25             |
| Dimensions of a pallet (LxWxH) (mm) | 1899x1220x1100 |
| Weight of a pallet (gross) (kg)     | 912            |
| Pallets per 13,6 m truck (pcs)      | 22             |
| Modules per 13,6 m truck (pcs)      | 550            |

