

DAS MODUL

Ninside Gemini RE



Monocrystalline module

Product range: 440-450w
 Product: DMMXSCNi G RE
 Type: TopCon Halfcut Rectangle

450 W
 MAXIMUM POWER OUTPUT

23%
 MAXIMUM EFFICIENCY



MADE IN GERMANY



O-PID

PID control is optimized through a combination of high-quality materials, ensuring the absence of PID (Potential Induced Degradation) phenomenon.



LID Performance

Our Ni-RE cells are neutral to the LID (Light Induced Degradation) effect, with no boron-oxygen interaction, ensuring long-lasting performance.



Reliability

DAS MODUL is a mark of proven quality with over 10 years of experience in this range. We offer a 30-year warranty on both mechanical parts and performance.



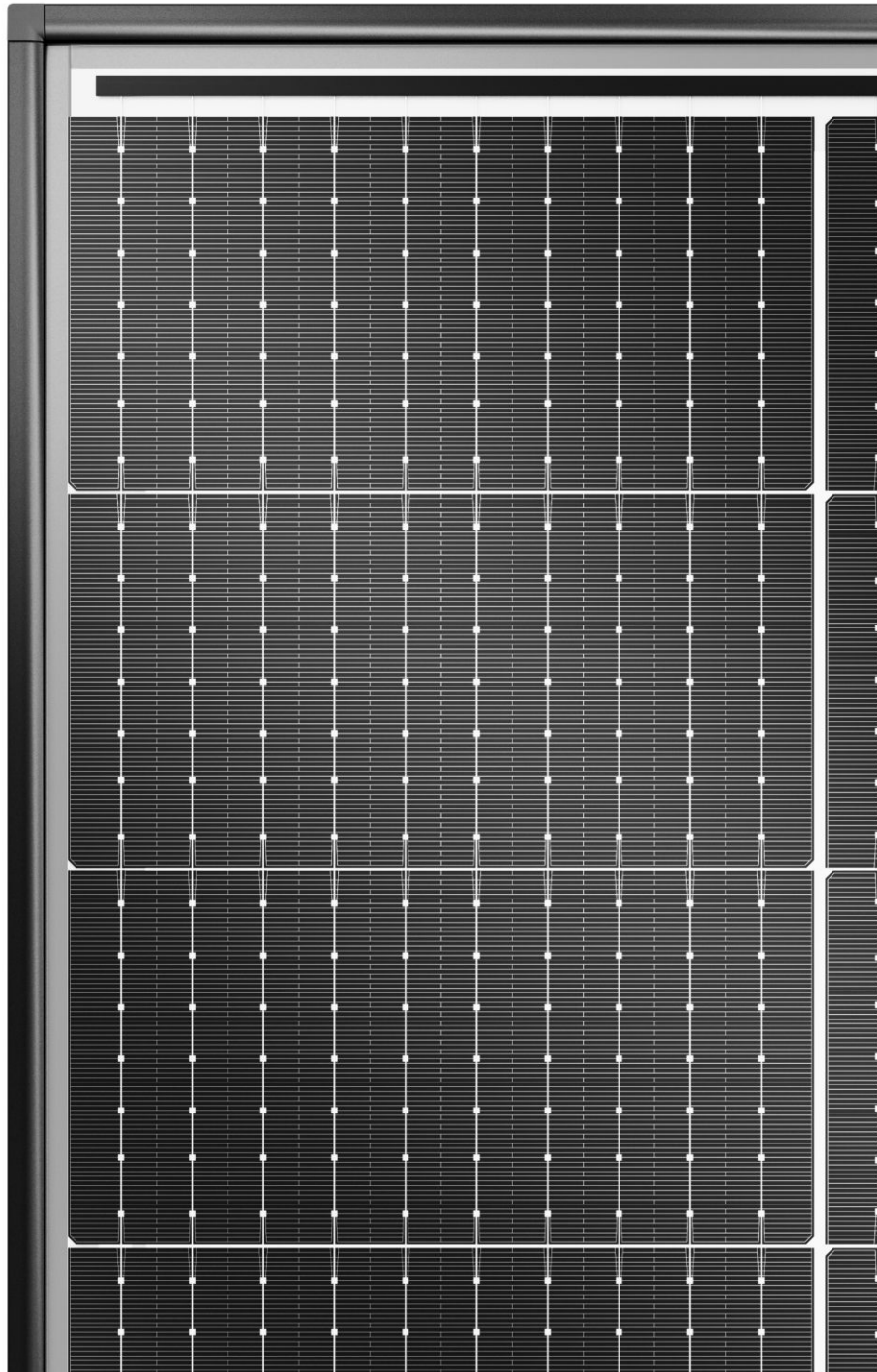
Clever

Gemini BiFacial ensures superior efficiency. Its tested, EU-origin transparent backsheet, free of fluorine, guarantees durability. The lightweight structure provides high strength.

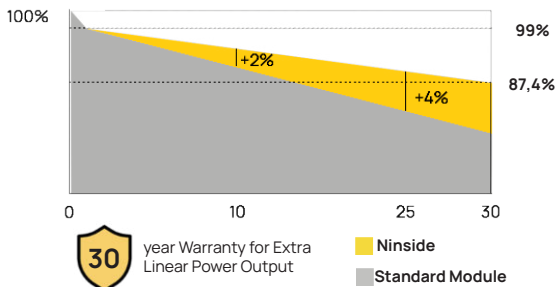


SMBB

Soluxtec's Smart Wire technology enables Das Modul RE to optimize light capture, ensuring a consistent current flow for higher power output and improved energy efficiency.



Soluxtec Solar's Performance Warranty



Comprehensive Products and System Certificates



- IEC61215:2021 / IEC61730:2023
- IEC61701 / IEC62716 / IEC60068 / IEC62804
- ISO9001:2015: Quality Management System
- ISO14001:2015: Environmental Management System
- ISO45001:2018: Occupational health and safety management systems
- UNI 9177 : Fire test class 1
- HIR Class 4 by IBS



30 years
Product warranty

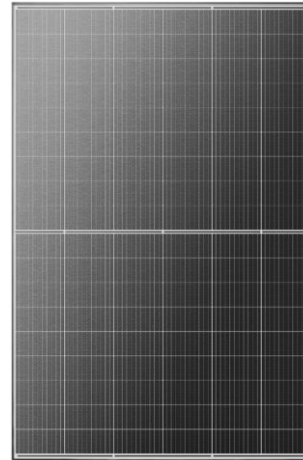
30 years
Linear Power Warranty

1%
First year degradation

0,4%
Annual Degradation
Over 30 Years

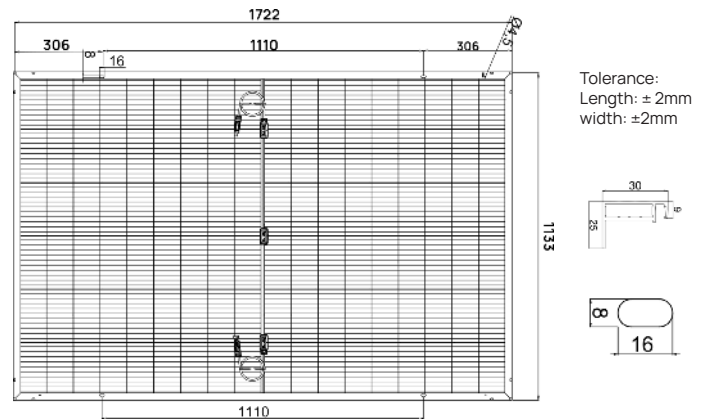
ELECTRICAL PARAMETERS UNDER STC CONDITIONS

| Model | DMMXSCNi 440 | DMMXSCNi 445 | DMMXSCNi 450 |
|------------------------------|--|----------------|-----------------|
| Maximum Power Point (Pmax)* | 440 | 445 | 450w |
| Open Circuit Voltage (Voc) | 38,88 | 39,05 | 39,22 |
| Short Circuit Current (Isc) | 14,12 | 14,20 | 14,28 |
| Maximum Power Voltage (Vmpp) | 32,82 | 33,00 | 33,18 |
| Maximum Power Current (Impp) | 13,41 | 13,49 | 13,57 |
| Module Efficiency (%) | 21,59 | 22,83 | 23,09 |
| Temperature coefficient TC | Isc: +0,03%/°C | Voc: -0,28%/°C | Pmpp: -0,30%/°C |
| Power Tolerance (Wp) | 0-4,99Wp <small>(1000 w/m2, 25°C, +/-2°C, AM=1,5 according to IEC 60904_3).</small> | | |



ELECTRICAL PARAMETERS UNDER BNPI CONDITIONS

| Model | DMMXSCNi 440 | DMMXSCNi 445 | DMMXSCNi 450 |
|--|--------------|--------------|--------------|
| Maximum Power Point (Pmax) | 490 | 496 | 502 |
| Open Circuit Voltage (Voc) | 38,88 | 39,05 | 39,22 |
| Short Circuit Current (Isc) | 15,64 | 15,73 | 15,82 |
| Maximum Power Voltage (Vmpp) | 32,95 | 33,13 | 33,31 |
| Maximum Power Current (Impp) | 14,87 | 14,97 | 15,08 |
| <small>(BNPI: Irradiance: front 1000W/m², rear 135W/m², Cell Temperature 25°C, AM=1.5)</small> | | | |



ELECTRICAL PARAMETERS UNDER NMOT CONDITIONS

| Model | DMMXSCNi 440 | DMMXSCNi 445 | DMMXSCNi 450 |
|--------------------------------------|--------------|--------------|--------------|
| Maximum Power Point (Pmax) | 329 | 333 | 341 |
| Open Circuit Voltage (Voc) | 36,59 | 36,76 | 37,1 |
| Short Circuit Current (Isc) | 11,25 | 11,31 | 11,6 |
| Maximum Power Voltage (Vmpp) | 30,83 | 31,01 | 30,89 |
| Maximum Power Current (Impp) | 10,69 | 10,76 | 11,05 |
| <small>(800W/m2,NMOT,AM=1,5)</small> | | | |

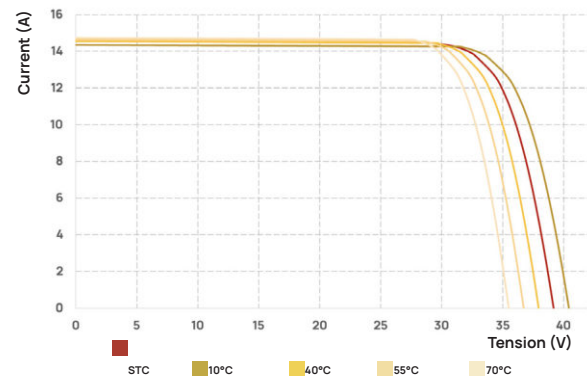
OPERATING CONDITIONS

| | |
|---------------------------|---|
| Max. Operating Voltage: | 1500 Vdc |
| Protection Class: | Class II |
| Operating T° range: | - 40°C ... + 85°C |
| Max. Reverse Current: | 25 A |
| STC 25°C: | +/- 2°C |
| NMOT 45° C: | +/- 2°C |
| Design load + (snow): | 3600 PA |
| Maximum test load +: | 5400 PA |
| Design load - (wind): | 2666 PA |
| Maximum test load - : | 4000 PA |
| Bifaciality Coefficient : | φVoc: 98 ± 5 % φIsc: 80 ± 5 % φPmax: 80 ± 5 % |

PACKAGING

| | |
|---------------------|-------------------|
| Per pallets : | 34 modules |
| Per truck : | 28 pallets |
| Pallet dimensions : | 1775x1185x1260 mm |
| Pallet weight : | 714 kg |

CURRENT-VOLTAGE CURVES STC (DMMXSCNi BB 445W)



MECHANICAL PROPERTIES

| | |
|----------------|---------------------------------|
| Dimensions : | 1722 * 1133 * 30 mm |
| Weight : | 21,5 kg +/- 3 % |
| Cell : | 108 half cut Mono TOPCON N-TYPE |
| Junction Box : | IP 68,3 diodes potted |
| Connectors : | MC4 Evo2 or Compatible |
| Cables : | 2 * 1200 mm |
| Solar Glass : | 3,2 mm tempered ARC |