

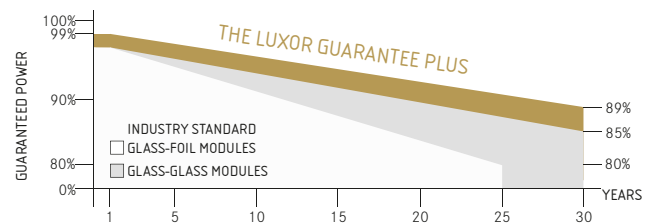
- + POWERFUL N-TYPE TOPCON CELLS
- + DOUBLE GLASS: HIGHER MECHANICAL AND THERMAL STABILITY
- + BIFACIAL: DOUBLE-SIDED POWER GENERATION FOR MORE YIELD
- + REDUCTION OF BOS-COSTS THROUGH HIGHER PERFORMANCE PER MODULE
- + APPLICATION: WHEREVER LONGEVITY AND ROBUSTNESS ARE REQUIRED



product guarantee¹



linear performance guarantee¹



ECO LINE TOPCON GLASS-GLASS BIFACIAL

M108 / 445 - 465W

MONOCRYSTALLINE MODULE FAMILY, BLACK FRAME, WHITE MESH



Longlife tested



Power proofed



Safety provided



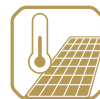
Selection of components



Back glass



Performance surplus of 0 Wp to 6.49 Wp



Higher heat dispensing



PID free
LID Free



German warrantor

ECO LINE TOPCON GLASS-GLASS BIFACIAL

M108 / 445 - 465 W, BLACK FRAME, WHITE MESH

Module type LX - XXXM/182R188-108+ GG | XXX = Rated power Pmpp

Electrical data at STC

| | | | | | |
|------------------------------------|--------|--------|--------|--------|--------|
| Rated power Pmpp [Wp] | 445.00 | 450.00 | 455.00 | 460.00 | 465.00 |
| Pmpp range to | 451.49 | 456.49 | 461.49 | 466.49 | 471.49 |
| Rated current Impp [A] | 13.73 | 13.80 | 13.87 | 13.94 | 14.00 |
| Rated voltage Vmpp [V] | 32.44 | 32.63 | 32.83 | 33.03 | 33.23 |
| Short-circuit current Isc [A] | 14.51 | 14.59 | 14.66 | 14.74 | 14.80 |
| Open-circuit voltage Uoc [V] | 38.85 | 39.08 | 39.32 | 39.56 | 39.80 |
| Efficiency at STC up to | 22.60% | 22.85% | 23.10% | 23.35% | 23.60% |
| Efficiency at 200 W/m ² | 22.05% | 22.30% | 22.55% | 22.80% | 23.04% |

Electrical data at NOCT

| | | | | | |
|-------------------------------|--------|--------|--------|--------|--------|
| Power at Pmpp [Wp] | 335.35 | 339.12 | 342.89 | 346.66 | 350.42 |
| Rated current Impp [A] | 11.08 | 11.14 | 11.20 | 11.25 | 11.30 |
| Rated voltage Vmpp [V] | 30.27 | 30.44 | 30.62 | 30.81 | 31.01 |
| Short-circuit current Isc [A] | 11.71 | 11.78 | 11.83 | 11.90 | 11.95 |
| Open-circuit voltage Uoc [V] | 35.86 | 36.08 | 36.32 | 36.55 | 36.78 |

Specification as per STC (Standard test conditions): irradiance 1000 W/m² | module temperature 25°C | Air Mass = 1.5
 NOCT (nominal operating cell temperature): irradiance 800 W/m² | wind speed 1 m/sec | ambient temperature 20°C |
 cell operating temperature 45 +/- 2°C | Air Mass = 1.5

Bifacial Gain* (e.g. 455 Wp)

| | | | | | |
|-------------------------------|--------|--------|--------|--------|--------|
| Backside power gain [Wp] | 5% | 10% | 15% | 20% | 25% |
| Rated power Pmpp [Wp] | 477.75 | 500.50 | 523.25 | 546.00 | 568.75 |
| Rated current Impp [A] | 14.55 | 15.25 | 15.94 | 16.63 | 17.32 |
| Rated voltage Vmpp [V] | 32.83 | 32.83 | 32.83 | 32.84 | 32.84 |
| Short-circuit current Isc [A] | 15.39 | 16.13 | 16.86 | 17.59 | 18.33 |
| Open-circuit voltage Uoc [V] | 39.32 | 39.32 | 39.32 | 39.33 | 39.33 |

*depending on the reflection of the underlying surface

Limiting values

| | |
|--|-------------------------|
| Max. system voltage max. return current | 1000 V or 1500 V 30 A |
| Safety class Fire safety class | II C (IEC 61730) |
| Operating temperature | -40 up to 85°C |
| Max. tested pressure/tensile load ² | 6000 Pa / 4000 Pa |

Temperature coefficient

| | |
|---|--------------------------------------|
| Temperature coefficient [U] [I] [P] | -0.25 %/°C 0.045 %/°C -0.29 %/°C |
|---|--------------------------------------|

Specifications

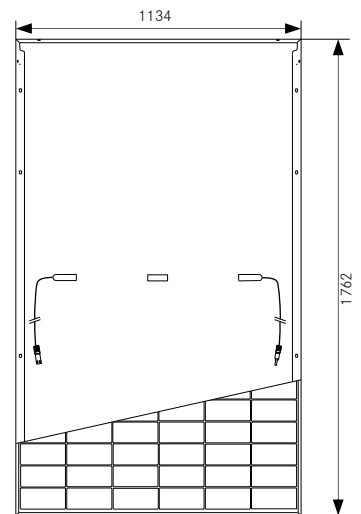
| | |
|---|--|
| Cells (matrix) Wafer Type | 108 (6x18) M10 N-Type TOPCon |
| Module dimensions (L x W x H) ³ Weight | 1762 mm x 1134 mm x 30 mm 24.5 kg |
| Bifaciality factor ⁵ | Up to 80% |
| Front side | 2.0 mm semi tempered anti-reflection solar glass |
| Back side | 2.0 mm semi tempered solar glass, white mesh |
| Frame | Stable anodised aluminium frame |
| Embedding material | POE / EVA |
| Junction Box Diodes | At least IP67 3 Schottky Diodes |
| Cable | Symmetrical cable lengths > 1.1 m, 4 mm ² solar cable |
| Connectors | MC4 or equivalent (IP67) |
| Hail test (max. hailstorm) | Ø 45 mm impact velocity 30.7 m/s ± 110.5 km/h |

The specifications and average values can vary slightly. Relevant is the corresponding data of the individual measurement.
 Specifications are subject to change without notice. Tolerance depending on equipment: rated power +/- 3%, other values +/- 10%.
 All information given in this data sheet corresponds to DIN EN 50380. A potential light-induced degradation of the power after commissioning is not considered here. Further information in the installation manuals.

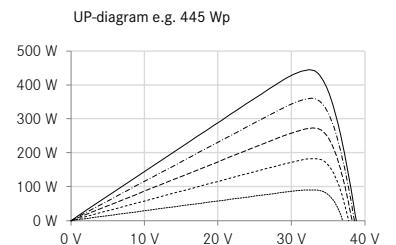
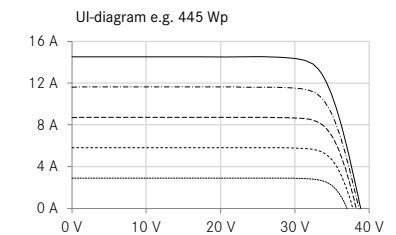
- The specific warranty conditions are given under www.luxor.solar/downloads.html
- Horizontal mounted (IEC61215), for details please check mounting instruction
- Tolerance L/W = +/- 3 mm, H +/- 2 mm, the dimensions given in the order confirmation will be decisive
- Location and dimensions of holes on request
- N-Type TOPCon Bifaciality factor 77 +/- 3 %

Your specialised Luxor partner

Back - / Frontview ^{3, 4}



Electrical characteristics



..... 200W/m²
 400W/m²
 600W/m²
 800W/m²
 1000W/m²



Guidelines:
 93/68/EEC
 2014/35/EU, (LVD)
 2014/30/EU, (EMC)

The validity of the certificates/listings for a specific country has to be examined under: www.luxor.solar/downloads.html