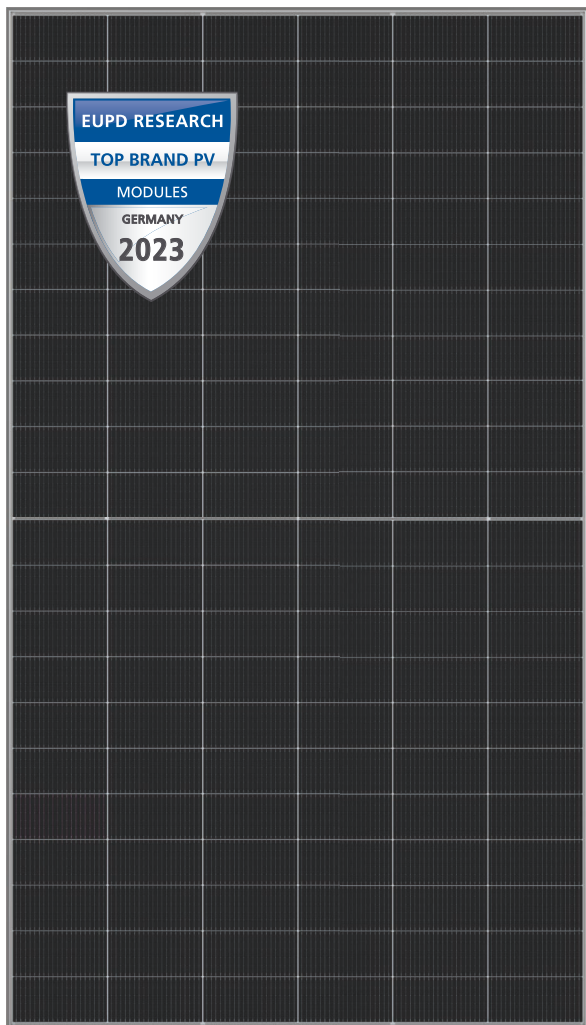




**LUXOR**  
solar module manufacturer since 2007



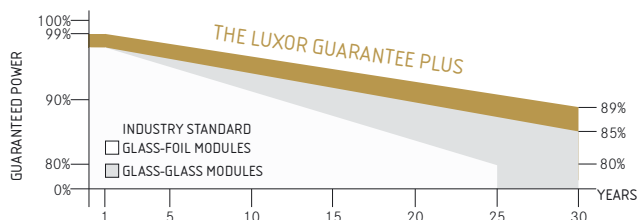
- + POWERFUL N-TYPE TOPCON CELLS
- + DOUBLE GLASS: HIGHER MECHANICAL STABILITY AND FIRE SAFETY
- + BIFACIAL: DOUBLE-SIDED POWER GENERATION FOR MORE YIELD
- + REDUCTION OF BALANCE-OF-SYSTEM-COSTS THROUGH HIGHER PERFORMANCE PER MODULE
- + APPLICATION: WHEREVER LONGEVITY AND ROBUSTNESS ARE REQUIRED



product guarantee<sup>1</sup>



linear performance guarantee<sup>1</sup>



ECO LINE N-TYPE TOPCON GLASS-GLASS BIF

M132 / 680 - 700W

MONOCRYSTALLINE N-TYPE MODULE FAMILY, WHITE MESH



Longlife tested



Power proofed



Safety provided



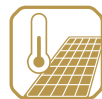
Selection of components



Back glass



Performance surplus of 0 Wp to 6.49 Wp



Higher heat dispensing



PID free  
LID Free



German warrantor

# ECO LINE N-TYPE TOPCON GLASS-GLASS BIF

## M132 / 680 - 700 W, WHITE MESH

Module type LX - XXX M/210-132+ GG | XXX = Rated power Pmpp

### Electrical data at STC

Rated power Pmpp [Wp]	680.00	685.00	690.00	695.00	700.00
Pmpp range to	686.49	691.49	696.49	701.49	706.49
Rated current Impp [A]	17.19	17.23	17.27	17.30	17.34
Rated voltage Vmpp [V]	39.58	39.78	39.98	40.18	40.38
Short-circuit current Isc [A]	18.29	18.33	18.37	18.40	18.45
Open-circuit voltage Uoc [V]	47.92	48.16	48.40	48.64	48.89
Efficiency at STC up to	22.10%	22.26%	22.42%	22.58%	22.74%
Efficiency at 200 W/m <sup>2</sup>	21.67%	21.83%	21.99%	22.14%	22.30%

### Electrical data at NOCT

Power at Pmpp [Wp]	511.36	515.12	518.88	522.64	526.40
Rated current Impp [A]	13.88	13.91	13.94	13.96	14.00
Rated voltage Vmpp [V]	36.85	37.04	37.22	37.43	37.61
Short-circuit current Isc [A]	14.76	14.80	14.83	14.85	14.89
Open-circuit voltage Uoc [V]	44.23	44.47	44.70	44.94	45.18

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

### Bifacial Gain\* (e.g.690 Wp)

Backside power gain [Wp]	5%	10%	15%	20%	25%
Rated power Pmpp [Wp]	724,50	759,00	793,50	828,00	862,50
Rated current Impp [A]	18,12	18,98	19,85	20,71	21,57
Rated voltage Vmpp [V]	39,98	39,98	39,98	39,99	39,99
Short-circuit current Isc [A]	14,97	15,68	16,39	17,10	17,82
Open-circuit voltage Uoc [V]	48,40	48,40	48,40	48,41	48,41

\*depending on the reflection of the underlying surface

### Limiting values

Max. system voltage   max. return current	1500 V   30 A
Safety class   Fire safety class	II   C (according to IEC 61730)
Operating Temperature	-40 up to 85°C
Max. tested pressure load-/tensile <sup>2</sup>	5400 Pa / 2400 Pa

### Temperature coefficient

Temperature coefficient [U]   [I]   [P]	-0.25 % /°C   0.045 % /°C   -0.3 % /°C
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### Specifications

Cells (matrix)   Wafer   Type	132 (6 x 22)   M12, Half Cell   N-Type Topcon
Module dimensions (L x W x H) <sup>3</sup>   Weight	2384 mm x 1303 mm x 35 mm   38.7 kg
Bifaciality factor <sup>5</sup>	Up to 80 %
Front-side glass	2 mm highly transparent, anti-reflection solar glass
Back-side	2 mm highly transparent 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 > 1.4 m, 4 mm <sup>2</sup> solar cable
Connectors	MC4 or equivalent with IP67
Hail test (max. hailstorm)	Ø 45 mm   impact velocity 23 m/s ± 83 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. Measurement 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.

1 The specific warranty conditions are given under [www.luxor.solar/downloads.html](http://www.luxor.solar/downloads.html)

2 Horizontal mounted, for details please check mounting instruction

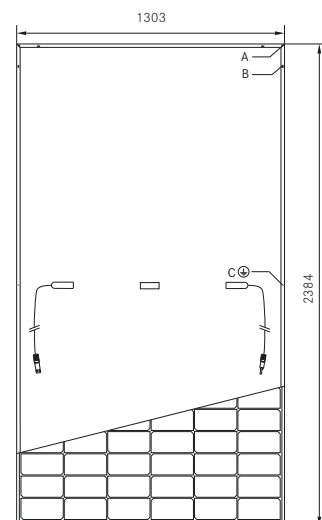
3 Tolerance L/W = +/- 3 mm, H +/- 2 mm, the dimensions given in the order confirmation will be decisive

4 Location and dimensios of holes on request

5 N-Type Topcon Bifaciality 77 % +/- 3 %

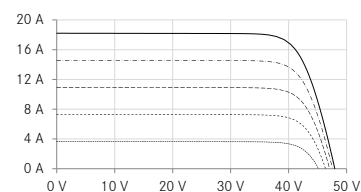
Luxor, your specialised company

### Back - / Frontview<sup>3,4</sup>

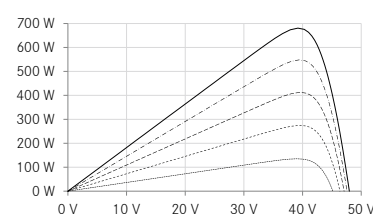


### Electrical characteristics

UI - diagram e.g. 680 Wp



UP - diagram e.g. 680 Wp



----- 200W/m<sup>2</sup>  
- - - - 400W/m<sup>2</sup>  
— — — 600W/m<sup>2</sup>  
- - - - 800W/m<sup>2</sup>  
— — — 1000W/m<sup>2</sup>



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](http://www.luxor.solar/downloads.html)