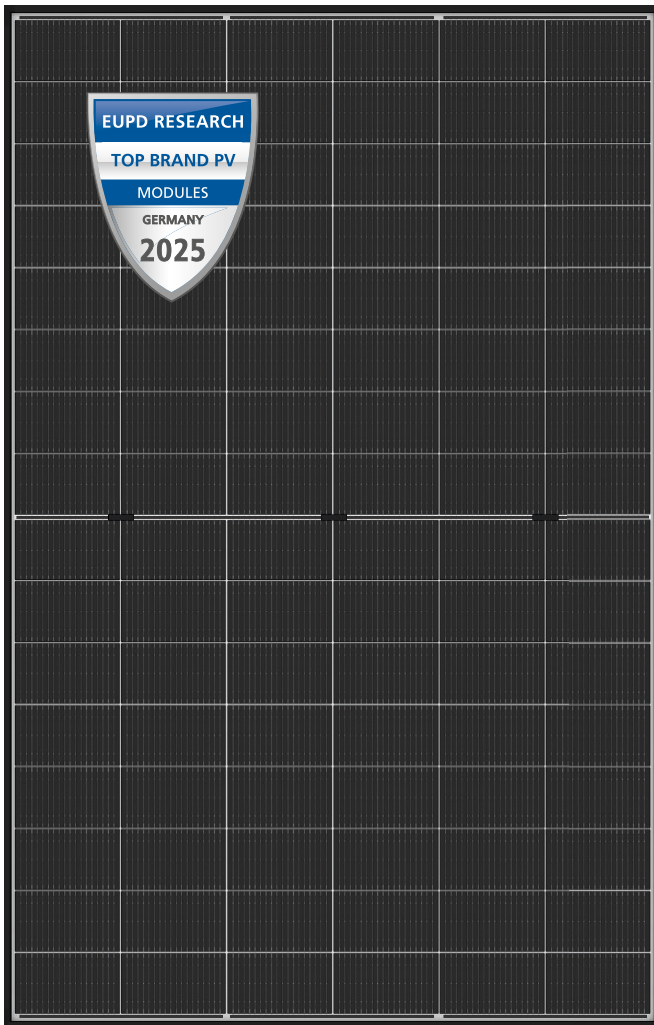


LUXOR

solar module manufacturer



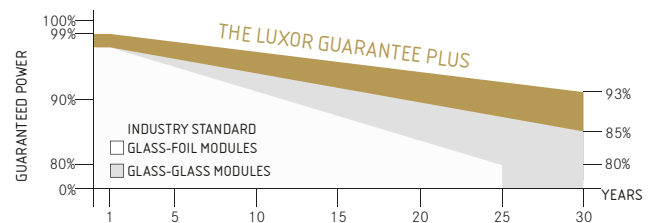
- + HIGHLY EFFICIENT N-TYPE HETEROJUNCTION CELLS
- + GLASS-GLASS: HIGHER MECHANICAL AND THERMAL STABILITY
- + BIFACIAL: DOUBLE-SIDED POWER GENERATION FOR MORE YIELD
- + HIGH CLASS APPEARANCE: EASY INTEGRATION IN BUILDINGS
- + SPECIAL EDGE SEALING
- + ESPECIALLY DURABLE AND ROBUST



product guarantee¹



linear performance guarantee¹



ECO LINE HJT GLASS-GLASS BIFACIAL

M96 / 445 - 465 W

MONOCRYSTALLINE MODULE FAMILY, BLACK FRAME, TRANSPARENT



Longlife tested



Power proofed



Safety provided



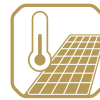
Edge-Sealing



Back glass



Performance surplus
of 0 Wp to 6.49 Wp



Higher heat
dispensing



PID free
LID free



German
warrantor

ECO LINE HJT GLASS-GLASS BIFACIAL

M96 / 445 - 465 W, BLACK FRAME, TRANSPARENT

Module type

LX - XXXM/182R-96+ 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]	14.43	14.53	14.64	14.74	14.84
Rated voltage Vmpp [V]	30.87	30.99	31.11	31.23	31.35
Short-circuit current Isc [A]	15.35	15.46	15.57	15.68	15.79
Open-circuit voltage Uoc [V]	37.88	38.02	38.17	38.32	38.47
Efficiency at STC up to	22.79%	23.05%	23.30%	23.55%	23.80%
Efficiency at 200 W/m ²	22.26%	22.51%	22.76%	23.01%	23.25%

Electrical data at NOCT

Power at Pmpp [Wp]	337.49	341.28	345.07	348.86	352.66
Rated current Impp [A]	11.64	11.72	11.81	11.89	11.97
Rated voltage Vmpp [V]	28.99	29.12	29.22	29.34	29.46
Short-circuit current Isc [A]	12.38	12.47	12.56	12.64	12.73
Open-circuit voltage Uoc [V]	34.96	35.10	35.25	35.40	35.55

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]	15.36	16.09	16.82	17.54	18.28
Rated voltage Vmpp [V]	31.11	31.11	31.11	31.12	31.12
Short-circuit current Isc [A]	16.35	17.13	17.91	18.68	19.46
Open-circuit voltage Uoc [V]	38.17	38.17	38.17	38.18	38.18

*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]	-0.24 %/°C 0.04 %/°C -0.26 %/°C
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Specifications

Cells (matrix) Wafer Type	96 (6x16) M10 N-Type HJT
Module dimensions (L x W x H) ³ Weight	1762 mm x 1134 mm x 30 mm 24.5 kg
Bifaciality factor ⁵ Transparency	Up to 95% approx. 7%
Front side	2.0 mm semi tempered anti-reflection solar glass
Back side	2.0 mm semi tempered solar glass
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. 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

2 Horizontal mounted (IEC61215), for details please check mounting instruction

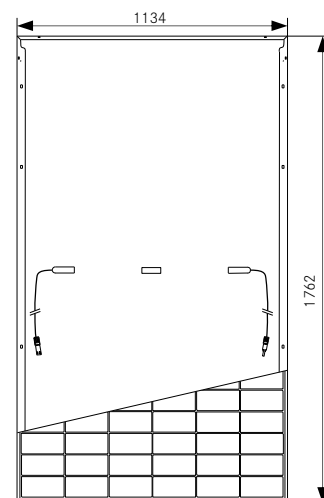
3 Tolerance L/W = +/- 3 mm, H +/- 2 mm, the dimensions given in the order confirmation will be decisive

4 Location and dimensios of holes on request

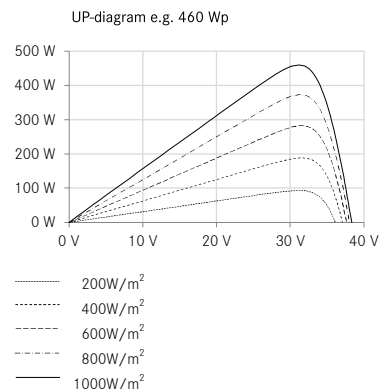
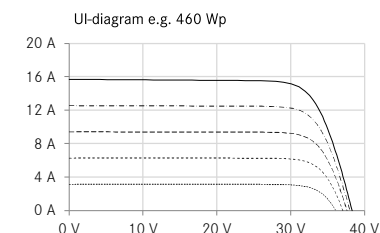
5 N-Type HJT Bifaciality factor 92 +/- 3 %

Your specialised Luxor partner

Back - / Frontview ^{3, 4}



Electrical characteristics



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