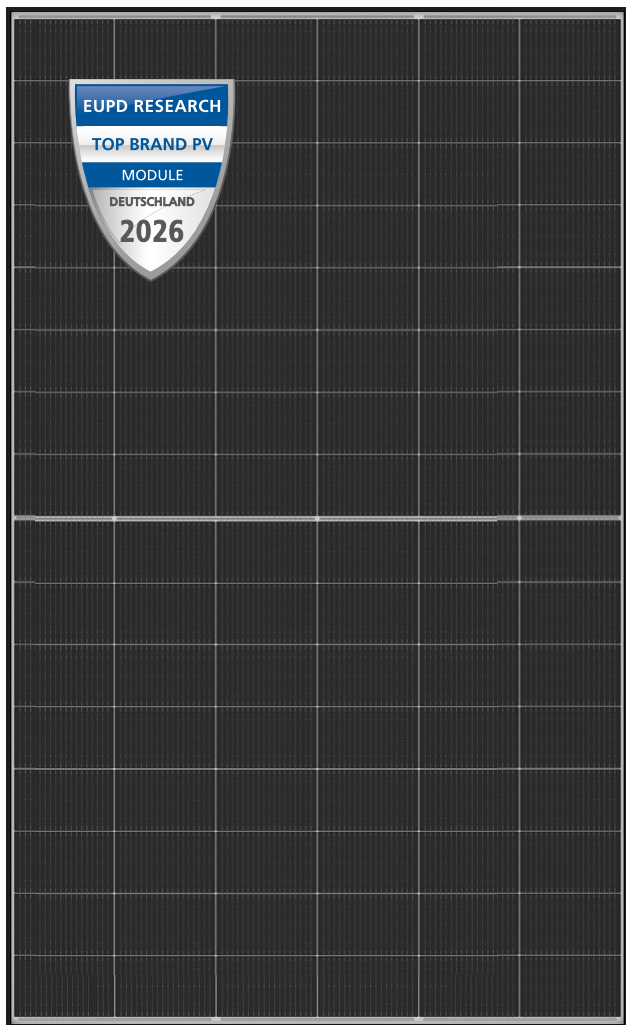




LUXOR

solar module manufacturer



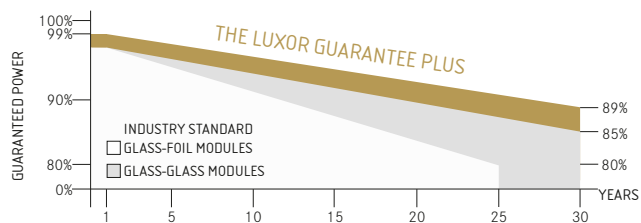
- + POWERFUL N-TYPE TOPCON CELLS
- + DOUBLE GLASS: HIGHER MECHANICAL AND THERMAL STABILITY
- + BIFACIAL: DOUBLE-SIDED POWER GENERATION FOR MORE YIELD
- + REDUCTION OF BOS-COSTS THROUGH HIGHER PERFORMANCE PER MODULE
- + APPLICATION: WHEREVER LONGEVITY AND ROBUSTNESS ARE REQUIRED



product guarantee¹



linear performance guarantee¹



ECO LINE PRO 460-480W

TOPCON BLACK WHITE

GLASS-GLASS, BIFACIAL, 1762MM X 1134MM



Longlife tested



Power proofed



Safety provided



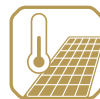
Selection of components



Back glass



Performance surplus of 0 Wp to 6.49 Wp



Higher heat dispensing



PID free
LID Free



German warrantor

ECO LINE PRO 460-480W

TOPCON, GLASS-GLASS, BIFACIAL, BW, 182R-96+

Module type LX - XXXM/182R-96+ GG | XXX = Rated power Pmpp

Electrical data at STC

Rated power Pmpp [Wp]	460.00	465.00	470.00	475.00	480.00
Pmpp range to	466.49	471.49	476.49	481.49	486.49
Rated current Imp [A]	15.37	15.46	15.55	15.64	15.73
Rated voltage Vmpp [V]	29.96	30.10	30.24	30.39	30.54
Short-circuit current Isc [A]	16.25	16.34	16.44	16.53	16.63
Open-circuit voltage Uoc [V]	36.27	36.44	36.61	36.79	36.97
Efficiency at STC up to	23.35%	23.60%	23.85%	24.10%	24.35%
Efficiency at 200 W/m ²	22.80%	23.04%	23.28%	23.54%	23.79%

Electrical data at NOCT

Power at Pmpp [Wp]	346.66	350.42	354.19	357.96	361.73
Rated current Imp [A]	12.41	12.48	12.55	12.62	12.70
Rated voltage Vmpp [V]	27.93	28.08	28.22	28.36	28.48
Short-circuit current Isc [A]	13.12	13.19	13.27	13.34	13.42
Open-circuit voltage Uoc [V]	33.48	33.65	33.81	33.99	34.17

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

Electrical data at BNPI

Rated power Pmpp [Wp]	460.00	465.00	470.00	475.00	480.00
Maximum Rated power Pmpp [Wp]	509.68	515.22	520.76	526.30	531.84
Rated current Imp [A]	17.03	17.13	17.23	17.33	17.43
Rated voltage Vmpp [V]	29.93	30.08	30.23	30.37	30.51
Short-circuit current Isc [A]	18.01	18.10	18.22	18.32	18.43
Open-circuit voltage Uoc [V]	36.31	36.48	36.65	36.83	37.01

Specifications as per BNPI (Bifacial Nameplate Irradiance) : irradiance front 1000 W/m² | rear 135 W/m² | Temperature 25°C | Air Mass 1.5

Limiting values

Max. system voltage max. return current	1500 V 30 A
Safety class Operating temperature	II -40 up to 85°C
Max. tested pressure/tensile load ²	6000 Pa/ 4000 Pa
Fire safety class according to IEC, EN, DIN	C (IEC 61730), B2 (DIN4102-1), E (EN13501-1), Broof(t2) (EN13501-5)

Temperature coefficient

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

Cells (matrix) Wafer Type	96 (6x16) M10 N-Type TOPCon
Module dimensions (L x B 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 Embedding material	Stable anodised aluminium frame POE / EVA
Junction Box Diodes Connectors	IP68 3 Schottky Dioden MC4-Evo2
Cable	Symmetrical cable lengths > 1.1 m, 4 mm ² solar cable
Hail test (max. hailstorm)	Ø 45 mm impact velocity 30.7 m/s ± 110.5 km/h
Hail resistance class according to IEC	HW 4 (IEC 61215)

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.

1 The specific warranty conditions for end customers are given under www.luxor.solar/downloads.html.

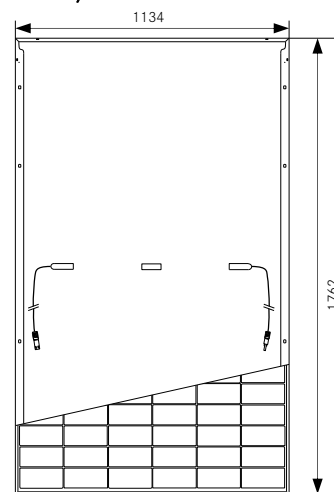
2 Horizontal mounted (IEC61215), for details please check mounting instruction.

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

4 Location and dimensions of holes on request.

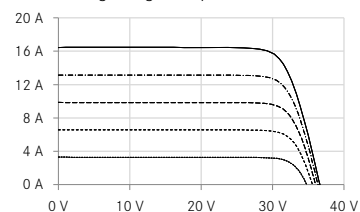
5 N-Type TOPCon Bifaciality factor 77 +/- 3 %.

Back - / Frontview ^{3, 4}

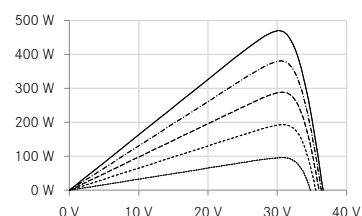


Electrical characteristics

UI-diagram e.g. 470 Wp



UP-diagram e.g. 470 Wp



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



IEC
IEC 61215
IEC 61730



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

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