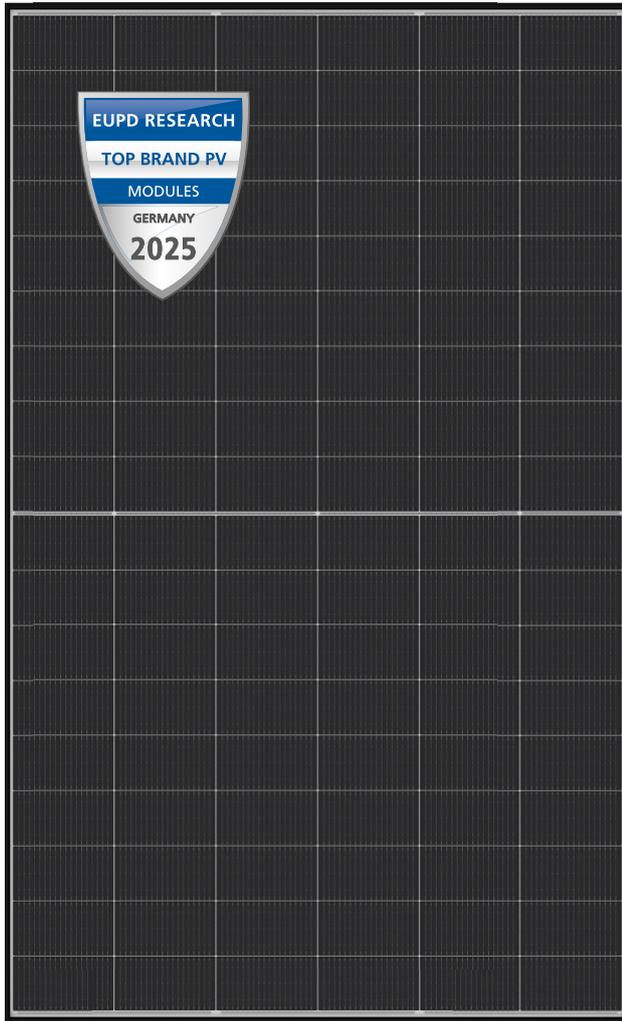




# LUXOR

solar module manufacturer



- + POWERFUL N-TYPE TOPCON CELLS
- + DOUBLE GLASS: HIGHER MECHANICAL AND THERMAL STABILITY
- + 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 PRO 450-470W

## TOPCON BLACK WHITE

### GLASS-GLASS, 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 450-470W

## TOPCON, GLASS-GLASS, BW, 182R188-108+

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

### Electrical data at STC

Rated power Pmpp [Wp]	450.00	455.00	460.00	465.00	470.00
Pmpp range to	456.49	461.49	466.49	471.49	476.49
Rated current Impp [A]	13.80	13.87	13.94	14.00	14.07
Rated voltage Vmpp [V]	32.63	32.83	33.03	33.23	33.43
Short-circuit current Isc [A]	14.59	14.66	14.74	14.80	14.87
Open-circuit voltage Uoc [V]	39.08	39.32	39.56	39.80	40.04
Efficiency at STC up to	22.85%	23.10%	23.35%	23.60%	23.85%
Efficiency at 200 W/m <sup>2</sup>	22.30%	22.55%	22.80%	23.04%	23.29%

### Electrical data at NOCT

Power at Pmpp [Wp]	339.12	342.89	346.66	350.42	354.19
Rated current Impp [A]	11.14	11.20	11.25	11.30	11.36
Rated voltage Vmpp [V]	30.44	30.62	30.81	31.01	31.18
Short-circuit current Isc [A]	11.78	11.83	11.90	11.95	12.00
Open-circuit voltage Uoc [V]	36.07	36.30	36.54	36.77	37.00

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

### 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 <sup>2</sup>	6000 Pa / 4000 Pa

### 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	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
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	At least IP67
Diodes	3 Schottky Diodes
Cable	Symmetrical cable lengths > 1.2 m, 4 mm <sup>2</sup> solar cable
Connectors	MC4 or equivalent (IP67)
Hail test (max. hailstorm)	∅ 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.

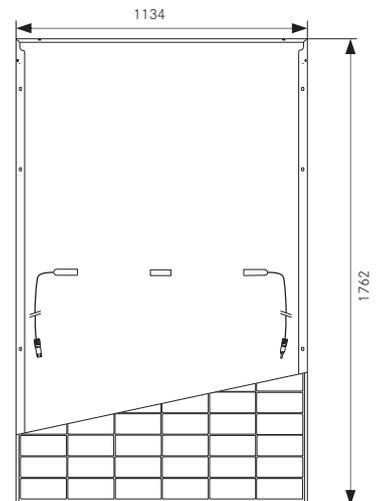
1 The specific warranty conditions are given under

2 Horizontal mounted (IEC61215), for details please check

3 Tolerance L/W = +/- 3 mm, H +/- 2 mm, the dimensions

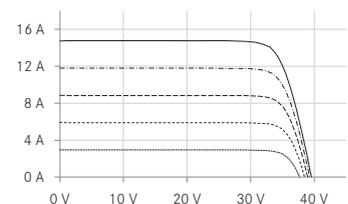
4 Location and dimensions of holes on request

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

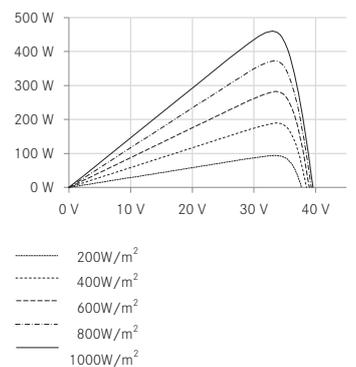


### Electrical characteristics

UI-diagram e.g. 460 Wp



UP-diagram e.g. 460 Wp



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)

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