

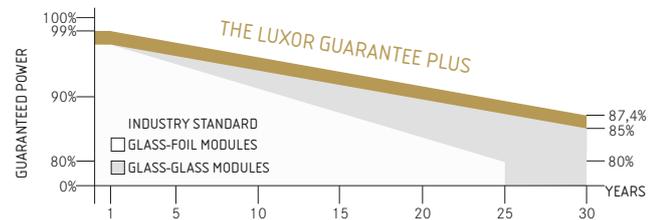
- + POWERFUL N-TYPE TOPCON CELLS
- + DOUBLE GLASS: HIGHER MECHANICAL AND THERMAL STABILITY
- + HIGH FRONT-SIDE EFFICIENCY FOR CONSISTENT PERFORMANCE
- + REDUCTION OF BALANCE-OF-SYSTEM-COSTS THROUGH HIGHER PERFORMANCE PER MODULE
- + ECONOMICAL AND ROBUST MODULE DESIGN



product guarantee¹



linear performance guarantee¹



ECO LINE CLASSIC 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 CLASSIC 450-470W

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

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

Electrical data at STC

	450.00	455.00	460.00	465.00	470.00
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 ²	22.30%	22.55%	22.80%	23.04%	23.29%

Electrical data at NOCT

	339.12	342.89	346.66	350.42	354.19
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/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

Limiting values

Max. system voltage max. return current	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	5400 Pa / 2400 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
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 ² solar cable
Connectors	MC4 Connectable
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.

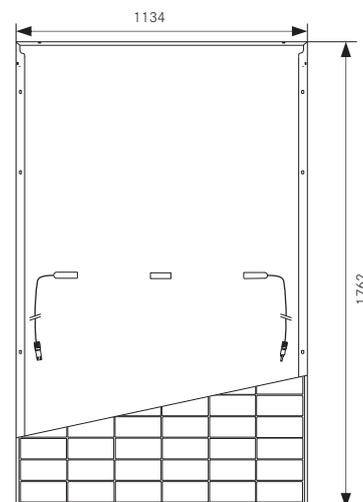
1 The specific warranty conditions are given under

2 Horizontal mounted (IEC61215), for details please check

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

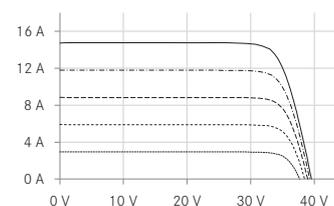
4 Location and dimensions of holes on request

Back - / Frontview ^{3, 4}

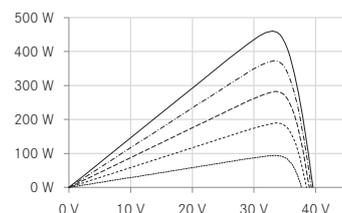


Electrical characteristics

UI-diagram e.g. 460 Wp



UP-diagram e.g. 460 Wp



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

Your specialised Luxor partner



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