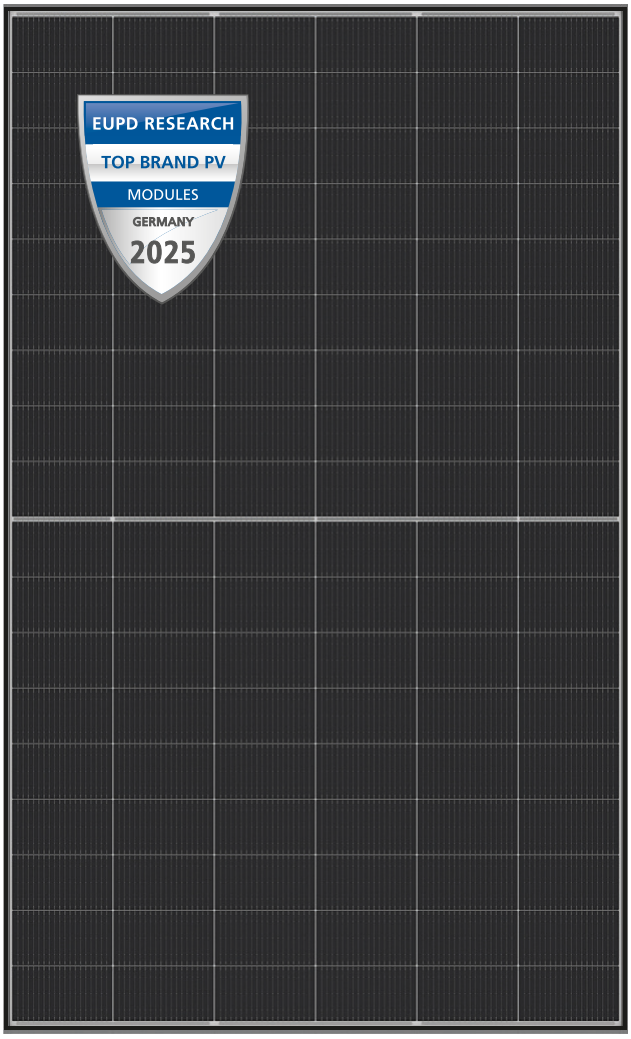
CLASSIC

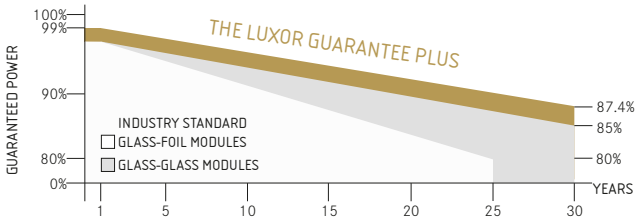
LUXOR
solar module manufacturer



- POWERFUL N-TYPE TOPCON CELLS
- DOUBLE GLASS: HIGHER MECHANICAL AND THERMAL STABILITY
- BIFACIAL: DOUBLE-SIDED POWER GENERATION FOR MORE YIELD
- REDUCTION OF BALANCE-OF-SYSTEM-COSTS THROUGH HIGHER PERFORMANCE PER MODULE
- ECONOMICAL AND ROBUST MODULE DESIGN

15 YEARS
productguarantee[1]

30 YEARS
linear performance guarantee[1]



ECO LINE CLASSIC 440-460W
TOPCON BLACK WHITE

GLASS-GLASS, BIFACIAL,1722MM X 1134MM

Longlife tested
- Selection of components
- Back glass

Power proofed
- Performance surplus of 0 Wp to 6.49 Wp
- Higher heat dispensing

Safety provided
- PID free LID Free
- German warrantor

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ECO LINE CLASSIC 440-460W

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

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

Electrical data at STC

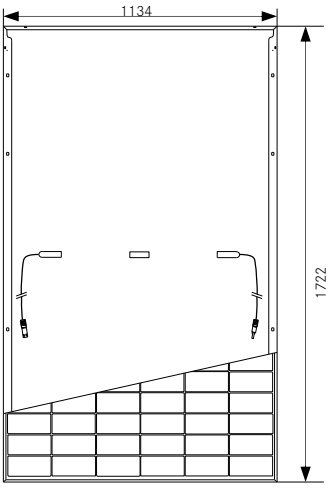
Rated power Pmpp [Wp]	440.00	445.00	450.00	455.00	460.00
Pmpp range to	446.49	451.49	456.49	461.49	466.49
Rated current Impp [A]	13.65	13.72	13.79	13.86	13.93
Rated voltage Vmpp [V]	32.27	32.46	32.65	32.85	33.05
Short-circuit current Isc [A]	14.40	14.47	14.55	14.62	14.69
Open-circuit voltage Uoc [V]	39.07	39.30	39.53	39.77	40.01
Efficiency at STC up to	22.86%	23.12%	23.38%	23.63%	23.89%
Efficiency at 200 W/m^2	22.32%	22.56%	22.81%	23.07%	23.33%

Electrical data at NOCT

Power at Pmpp [Wp]	331.58	335.35	339.12	342.89	346.66
Rated current Impp [A]	11.02	11.07	11.13	11.19	11.24
Rated voltage Vmpp [V]	30.09	30.29	30.47	30.64	30.84
Short-circuit current Isc [A]	11.62	11.68	11.74	11.80	11.86
Open-circuit voltage Uoc [V]	36.06	36.29	36.51	36.74	36.98

Specification as per STC (Standard test conditions): irradiance 1000 W/m^2 | 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

Back - / Frontview [3, 4]



Electrical data at BNPI

Rated power Pmpp [Wp]	440.00	445.00	450.00	455.00	460.00
Maximum Rated power Pmpp [Wp]	487.52	493.06	498.60	504.14	509.68
Rated current Impp [A]	15.12	15.20	15.28	15.36	15.43
Rated voltage Vmpp [V]	32.23	32.43	32.63	32.83	33.02
Short-circuit current Isc [A]	15.96	16.03	16.12	16.20	16.28
Open-circuit voltage Uoc [V]	39.11	39.34	39.57	39.81	40.05

Specifications as per BNPI (Bifacial Nameplate Irradiance) : irradiance front 1000 W/m^2 | rear 135 W/m^2 | Temperature 25°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[2]	5400 Pa / 2400 Pa

Temperature coefficient

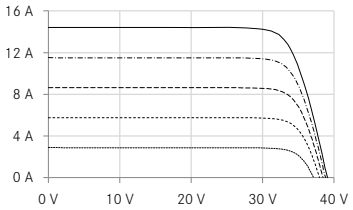
Temperature coefficient [U] | [I] | [P]	-0.25 %/°C | 0.045 %/°C | -0.29 %/°C

Specifications

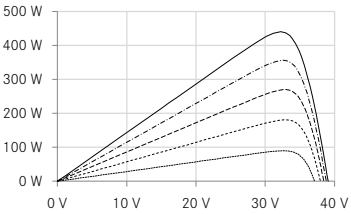
Cells (matrix) | Wafer | Type	108 (6x18) | M10 | N-Type TOPCon
Module dimensions (L x B x H)[3] | Weight	1722 mm x 1134 mm x 30 mm | 24.0 kg
Bifaciality factor[5]	Up to 80%
Front side	2.0 mm semi tempered anti-reflection solar glass
Back side	2.0 mm semi tempered solar glass, white mesh
Frame	Stable anodised aluminium frame
Embedding mateial	POE / EVA
Junction Box | Diodes	IP68 | 3 Schottky Diodes
Cable	Symmetrical cable lengths > 1.1 m, 4 mm² solar cable
Connectors	MC4 Connectable
Hail test (max. hailstorm)	⌀ 25 mm | impact velocity 23 m/s ≙ 83 km/h

Electrical characteristics

UI-diagram e.g. 440 Wp



UP-diagram e.g. 440 Wp



200W/m^2
400W/m^2
600W/m^2
800W/m^2
1000W/m^2

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 correspondes 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 TOPCon Bifaciality factor 77 +/- 3 %

Your specialised Luxor partner

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