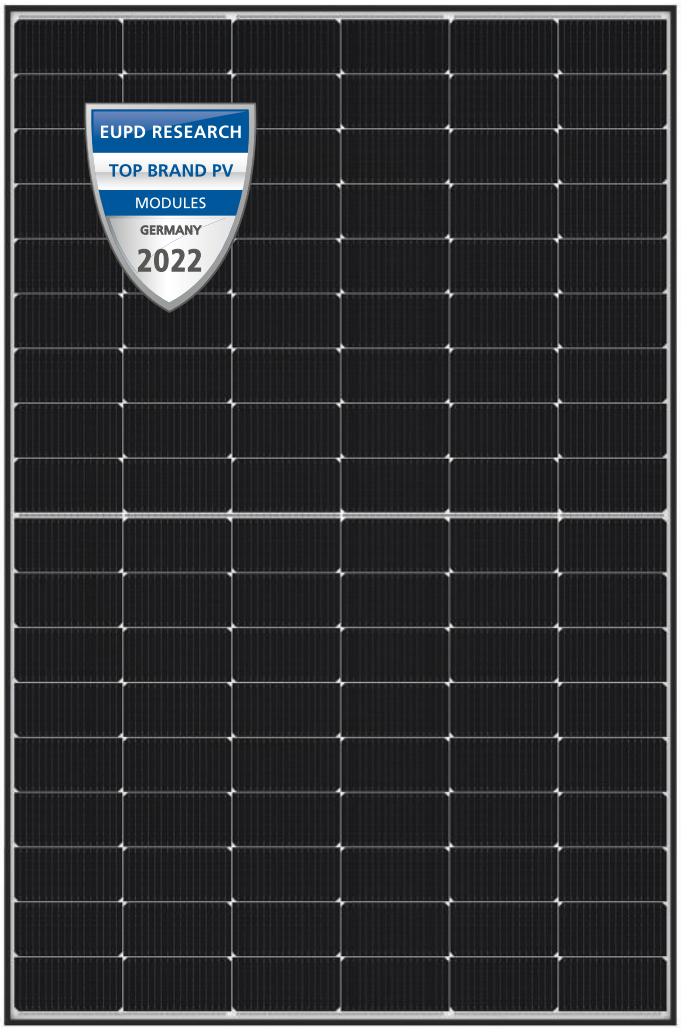
LUXOR

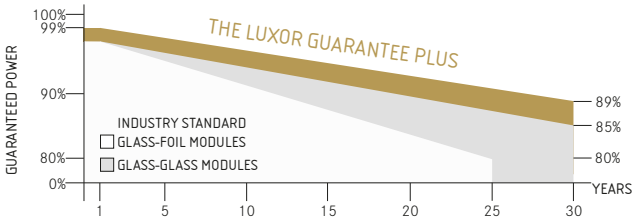
solar module manufacturer since 2007



+ POWERFUL N-TYPE CELLS
+ DOUBLE GLASS: HIGHER MECHANICAL STABILITY AND FIRE SAFETY
+ BIFACIAL: DOUBLE-SIDED POWER GENERATION FOR MORE YIELD
+ REDUCTION OF BALANCE-OF-SYSTEM-COSTS THROUGH HIGHER PERFOR-MANCE PER MODULE
+ APPLICATION: WHEREVER LONGEVITY AND ROBUSTNESS ARE REQUIRED

30 YEARS
product guarantee[1]

30 YEARS
linear performance guarantee[1]



ECO LINE N-TYPE GLASS-GLASS BIFACIAL

M108 / 415 - 435W

MONOCRYSTALLINE N-TYPE MODULE FAMILY, WHITE MESH, BLACK FRAME

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

Luxor Solar GmbH | Kornbergstraße 29 | 70176 Stuttgart | Germany | T+49.711.88 888-999 | info@luxor-solar.com | www.luxor.solar

ECO LINE N-TYPE GLASS-GLASS BIFACIAL

M108 / 415 - 435 W, WHITE MESH, BLACK FRAME

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

Electrical data at STC

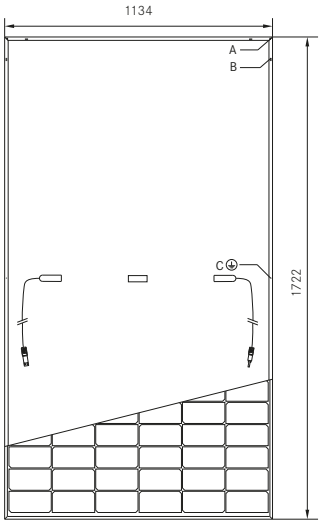
Rated power Pmpp [Wp]	415.00	420.00	425.00	430.00	435.00
Pmpp range to	421.49	426.49	431.49	436.49	441.49
Rated current Impp [A]	13.26	13.34	13.42	13.49	13.57
Rated voltage Vmpp [V]	31.32	31.51	31.70	31.89	32.08
Short-circuit current Isc [A]	13.99	14.07	14.16	14.23	14.31
Open-circuit voltage Uoc [V]	37.92	38.15	38.38	38.61	38.84
Efficiency at STC up to	21.58%	21.84%	22.10%	22.35%	22.61%
Efficiency at 200 W/m²	21.04%	21.30%	21.55%	21.80%	22.06%

Electrical data at NOCT

Power at Pmpp [Wp]	312.08	315.84	319.60	323.36	327.12
Rated current Impp [A]	10.70	10.77	10.83	10.89	10.95
Rated voltage Vmpp [V]	29.17	29.33	29.51	29.69	29.87
Short-circuit current Isc [A]	11.29	11.36	11.43	11.49	11.55
Open-circuit voltage Uoc [V]	35.00	35.22	35.45	35.67	35.90

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

Back - / Frontview[3]



Drilled holes[4]
A: 4 x drainage
B: 16 x ventilation
C: 8 x mounting

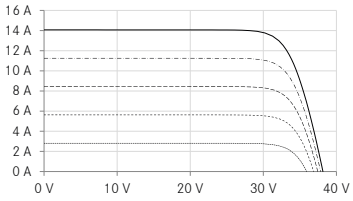
Bifacial Gain* (e.g.420 Wp)

Backside power gain [Wp]	5%	10%	15%	20%	25%
Rated power Pmpp [Wp]	441.00	462.00	483.00	504.00	525.00
Rated current Impp [A]	14.00	14.66	15.33	15.99	16.66
Rated voltage Vmpp [V]	31.51	31.51	31.51	31.52	31.52
Short-circuit current Isc [A]	14.77	15.48	16.18	16.88	17.59
Open-circuit voltage Uoc [V]	38.15	38.15	38.15	38.16	38.16

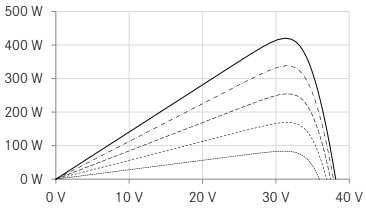
*depending on the reflection of the underlying surface

Electrical characteristics

UI -diagram e.g. 420Wp



UP - diagram e.g. 420 Wp



Limiting values

Max. system voltage | max. return current	1000 V or 1500 V | 30 A
Safety class | Fire safety class	II | A (according to IEC 61730)
Operating Temperature	-40 up to 85°C
Max. tested pressure load-/tensile[2]	5400 Pa / 2400 Pa

Temperature coefficient

Temperature coefficient [U] | [I] | [P]	-0.25 % /°C | 0.045 % /°C | -0.3 % /°C

Specifications

Cells (matrix) | Dimenstions | Type	108 (6 x 18) I 182 mm x 91 mm | N-Type Topcon
Module dimensions (L x W x H)[3] | Weight	1722 mm x 1134 mm x 30 mm | 24 kg
Bifaciality factor[5]	Up to 80 %
Front-side glass	2 mm tempered, highly transparent, anti-reflection solar glass
Back-side	2 mm tempered, highly transparent solar glass with white mesh
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 mm² solar cable
Connectors	MC4 or equivalent with IP67
Hail test (max. hailstorm)	⌀ 45 mm | impact velocity 23 m/s ≙ 83 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 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, 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 77 % +/- 3 %

Luxor, your specialised company

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