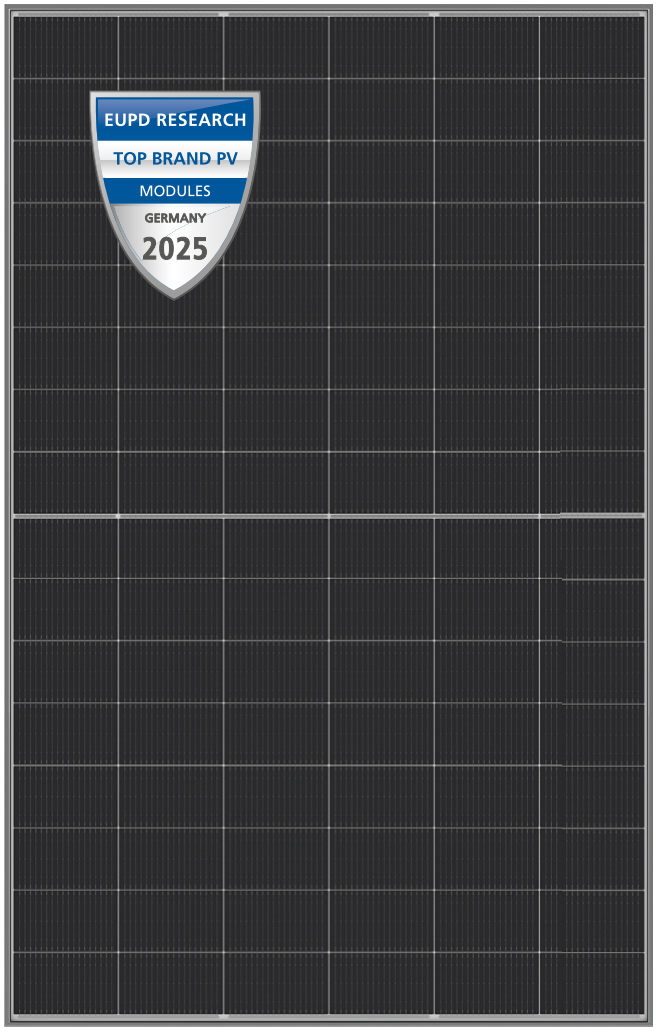
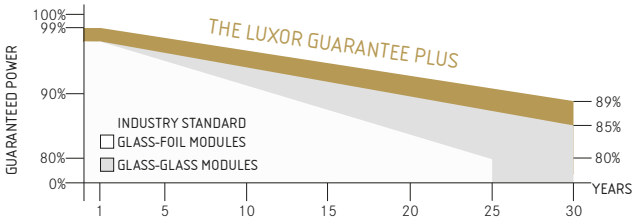
LUXOR
solar module manufacturer



+ 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
+ ECO: ESPEACIALLY ECONOMIC AND RELIABLE

30 YEARS
product guarantee[1]

30 YEARS
linear performance guarantee[1]



ECO LINE TOPCON GLASS-GLASS BIFACIAL

M96 / 435 - 455W

MONOCRYSTALLINE N-TYPE MODULE FAMILY

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 TOPCON GLASS-GLASS BIFACIAL

M96 / 435 - 455 W, WHITE MESH

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

Electrical data at STC

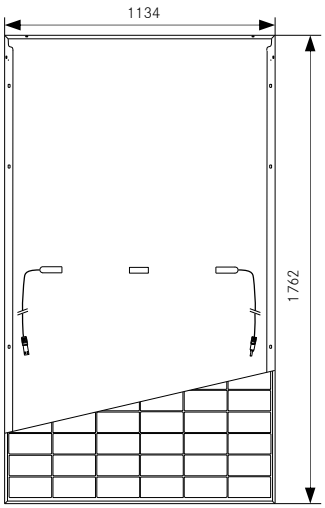
Rated power Pmpp [Wp]	435.00	440.00	445.00	450.00	455.00
Pmpp range to	441.49	446.49	451.49	456.49	461.49
Rated current Impp [A]	14.88	14.98	15.08	15.17	15.27
Rated voltage Vmpp [V]	29.26	29.40	29.54	29.68	29.82
Short-circuit current Isc [A]	15.73	15.84	15.94	16.04	16.14
Open-circuit voltage Uoc [V]	35.42	35.59	35.76	35.93	36.10
Efficiency at STC up to	22.10%	22.35%	22.60%	22.85%	23.10%
Efficiency at 200 W/m^2	21.56%	21.81%	22.06%	22.29%	22.55%

Electrical data at NOCT

Power at Pmpp [Wp]	327.82	331.58	335.35	339.12	342.89
Rated current Impp [A]	12.01	12.09	12.17	12.25	12.33
Rated voltage Vmpp [V]	27.30	27.43	27.56	27.68	27.81
Short-circuit current Isc [A]	12.70	12.79	12.87	12.95	13.03
Open-circuit voltage Uoc [V]	32.69	32.86	33.03	33.20	33.36

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, 4]



Bifacial Gain* (e.g. 445 Wp)

Backside power gain [Wp]	5%	10%	15%	20%	25%
Rated power Pmpp [Wp]	467.25	489.50	511.75	534.00	556.25
Rated current Impp [A]	15.82	16.57	17.32	18.07	18.82
Rated voltage Vmpp [V]	29.54	29.54	29.54	29.55	29.55
Short-circuit current Isc [A]	16.74	17.53	18.33	19.13	19.93
Open-circuit voltage Uoc [V]	35.76	35.76	35.76	35.77	35.77

*depending on the reflection of the underlying surface

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]	6000 Pa / 4000 Pa

Temperature coefficient

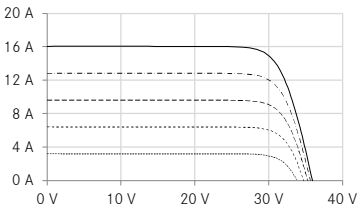
Temperature coefficient [U] | [I] | [P]	-0.25 %/°C | 0.045 %/°C | -0.29 %/°C

Specifications

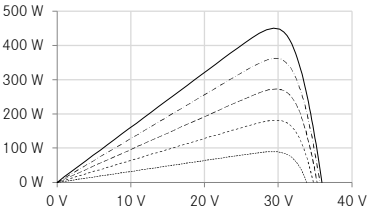
Cells (matrix) | Wafer | Type	96 (6x16) | M10 | N-Type TOPCon
Module dimensions (L x W x H)[3] | Weight	1762 mm x 1134 mm x 30 mm | 24.5 kg
Bifaciality factor[5]	Up to 80%
Front side	2.0 mm semi tempered anti-reflection solar glass
Back side	2.0 mm semi tempered solar glass, white mesh
Frame	Stable anodised aluminium frame
Embedding mateial	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 (IP67)
Hail test (max. hailstorm)	⌀ 45 mm | impact velocity 30.7 m/s ≙ 110.5 km/h

Electrical characteristics

UI-diagram e.g. 450 Wp



UP-diagram e.g. 450 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. 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 (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