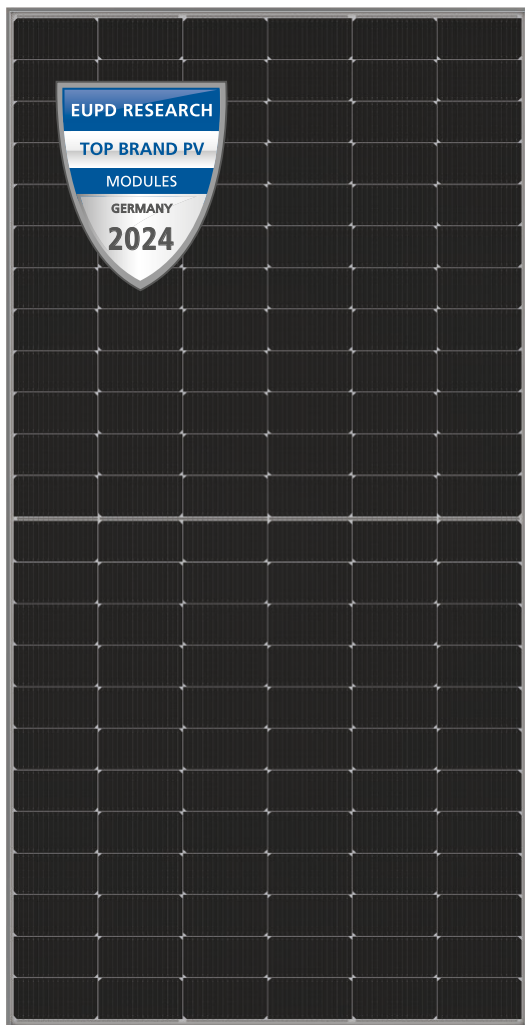




LUXOR
solar module manufacturer



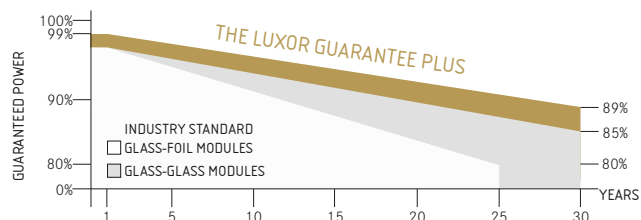
- + POWERFUL N-TYPE TOPCON CELLS
- + DOUBLE GLASS: HIGHER MECHANICAL STABILITY AND FIRE SAFETY
- + BIFACIAL: DOUBLE-SIDED POWER GENERATION FOR MORE YIELD
- + REDUCTION OF BALANCE-OF-SYSTEM-COSTS THROUGH HIGHER PERFORMANCE PER MODULE
- + APPLICATION: WHEREVER LONGEVITY AND ROBUSTNESS ARE REQUIRED



product guarantee¹



linear performance guarantee¹



ECO LINE N-TYPE TOPCON GLASS-GLASS BIF

M144/ 580 - 600W

MONOCRYSTALLINE N-TYPE TOPCON MODULE FAMILY, TRANSPARENT



Longlife tested



Power proofed



Safety provided



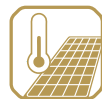
Selection of components



Back glass



Performance surplus of 0 Wp to 6.49 Wp



Higher heat dispensing



PID free LID Free



German warrantor

ECO LINE N-TYPE TOPCON GLASS-GLASS BIFACIAL

M144 / 580 - 600 W, TRANSPARENT

Module type LX - XXX M/182-144+ GG | XXX = Rated power P_{mp}

Electrical data at STC

Rated power P _{mp} [Wp]	580.00	585.00	590.00	595.00	600.00
P _{mp} range to	586.49	591.49	596.49	601.49	606.49
Rated current I _{mp} [A]	13.48	13.52	13.55	13.58	13.62
Rated voltage V _{mp} [V]	43.04	43.30	43.56	43.82	44.08
Short-circuit current I _{sc} [A]	14.22	14.26	14.29	14.32	14.37
Open-circuit voltage U _{oc} [V]	52.11	52.42	52.74	53.05	53.37
Efficiency at STC up to	22.70%	22.90%	23.09%	23.28%	23.48%
Efficiency at 200 W/m ²	22.22%	22.42%	22.61%	22.79%	22.99%

Electrical data at NOCT

Power at P _{mp} [Wp]	436.16	440.86	444.62	448.39	452.16
Rated current I _{mp} [A]	10.88	10.91	10.94	10.96	10.99
Rated voltage V _{mp} [V]	40.09	40.41	40.64	40.91	41.14
Short-circuit current I _{sc} [A]	11.48	11.51	11.53	11.56	11.60
Open-circuit voltage U _{oc} [V]	48.16	48.38	48.69	49.00	49.31

Specification as per STC (Standard test conditions): irradiance 1000W/m² | module temperature 25°C | Air Mass = 1.5
NOCT (nominal operating cell temperature): irradiance 800W/m² | wind speed 1 m/sec | ambient temperature 20°C | cell operating temperature 45 +/-2°C | Air Mass = 1.5

Bifacial Gain* (e.g. 595 Wp)

Backside power gain [Wp]	5%	10%	15%	20%	25%
Rated power P _{mp} [Wp]	624.75	654.50	684.25	714.00	743.75
Rated current I _{mp} [A]	14.26	14.94	15.62	16.29	16.97
Rated voltage V _{mp} [V]	43.82	43.82	43.82	43.83	43.83
Short-circuit current I _{sc} [A]	15.04	15.75	16.47	17.18	17.90
Open-circuit voltage U _{oc} [V]	53.05	53.05	53.05	53.06	53.06

*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 (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 -0.29 % / °C
---	--

Specifications

Cells (matrix) Dimenstions Type	144 (6 x 24) M10 N-Type TOPCon
Module dimensions (L x W x H) ³ Weight	2279 mm x 1134 mm x 35 mm 33.5 kg
Bifaciality factor ⁵	Up to 80 %
Front-side glass	2 mm semi tempered anti-reflection solar glass
Back-side	2 mm semi tempered solar glass
Frame	stable, anodised aluminium frame
Embedding material	POE/EVA
Junction Box Diodes	At least IP67 3 Schottky Diodes
Cable	Symmetrical cable lengths > 1.4 m, 4 mm ² solar cable
Connectors	MC4 or equivalent with IP67
Hail test (max. hailstorm)	Ø 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 www.luxor.solar/downloads.html

2 Horizontal mounted, for details please check mounting instruction

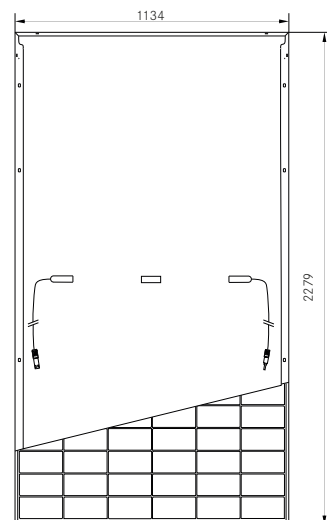
3 Tolerance L/W = +/- 3 mm, H +/- 2 mm, the dimensions given in the order confirmation will be decisive

4 Location and dimensios of holes on request

5 N-Type TOPCon Bifaciality 77 % +/- 3 %

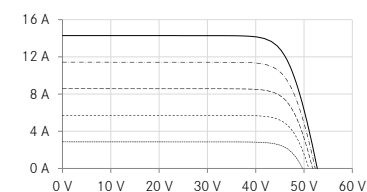
Luxor, your specialised company

Back - / Frontview³

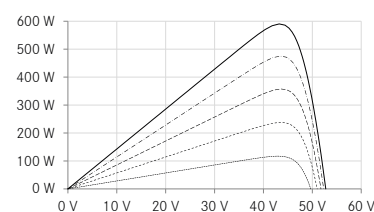


Electrical characteristics

UI - diagram e.g. 590 Wp



UP - diagram e.g. 590 Wp



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



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