

- + BIFACIAL: DOUBLE-SIDED POWER GENERATION FOR MORE YIELD
- + REDUCED LOSSES DURING PARTIAL SHADING
- + REDUCTION OF BALANCE-OF-SYSTEM-COSTS THROUGH HIGHER PERFORMANCE PER MODULE
- + ESPECIALLY ECONOMIC FOR COMMERCIAL SYSTEMS



product guarantee¹



linear performance guarantee¹



ECO LINE HALF CELL BIFACIAL

M144 / 540 - 560 W

MONOCRYSTALLINE MODULE FAMILY, WHITE MESH



Longlife tested



Power proofed



Safety provided



Selection of components



Cross-linking degree test



Performance surplus of 0 Wp to 6.49 Wp



100% PID free cells



Special packing to avoid micro cracks in the cells



German warrantor

ECO LINE HALF CELL BIFACIAL

M144 / 540-560 W, WHITE MESH

Module type LX - XXXM/182-144+ BiF | XXX = Rated power Pmpp

Electrical data at STC

Rated power Pmpp [Wp]	540.00	545.00	550.00	555.00	560.00
Pmpp range to	546.49	551.49	556.49	561.49	566.49
Rated current Impp [A]	13.15	13.22	13.29	13.37	13.44
Rated voltage Vmpp [V]	41.10	41.25	41.39	41.54	41.69
Short-circuit current Isc [A]	13.89	13.96	14.03	14.12	14.19
Open-circuit voltage Uoc [V]	49.28	49.45	49.63	49.81	49.99
Efficiency at STC up to	21.36%	21.56%	21.75%	21.95%	22.14%
Efficiency at 200 W/m ²	20.86%	21.05%	21.23%	21.44%	21.63%

Electrical data at NOCT

Power at Pmpp [Wp]	400.90	404.61	408.32	412.03	415.74
Rated current Impp [A]	10.62	10.68	10.74	10.80	10.86
Rated voltage Vmpp [V]	37.74	37.89	38.03	38.15	38.29
Short-circuit current Isc [A]	11.21	11.27	11.33	11.40	11.46
Open-circuit voltage Uoc [V]	45.48	45.66	45.84	46.02	46.20

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

Bifacial Gain* (e.g. 545Wp)

Backside power gain [Wp]	5%	10%	15%	20%	25%
Rated power Pmpp [Wp]	572.25	599.50	626.75	654.00	681.25
Rated current Impp [A]	13.89	14.55	15.21	15.87	16.53
Rated voltage Vmpp [V]	41.25	41.25	41.25	41.25	41.25
Short-circuit current Isc [A]	14.66	15.36	16.05	16.75	17.45
Open-circuit voltage Uoc [V]	49.45	49.45	49.45	49.46	49.46

*depending on the reflection of the underlying surface

Limiting values

Max. system voltage max. return current	1500 V 25 A
Safety class Fire safety class	II A (according to IEC 61730)
Operating Temperature	-40 bis 85°C
Max. tested pressure load-/tensile ²	5400 Pa / 2400 Pa

Temperature coefficient

Temperature coefficient [U] [I] [P]	-0.285% /°C 0.049% /°C -0.360% /°C
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Specifications

Number of cells (matrix)	144 (6 x 24) 182 mm x 91 mm
Module dimensions (L x W x H) ³ Weight	2279 mm x 1134 mm x 35 mm 29 kg
Bifaciality factor	75 +/- 5%
Front-side	3,2 mm tempered, highly transparent, anti-reflection solar glass
Back-side	transparent foil
Frame	stable, anodised aluminium frame
Embedding material	POE/EVA
Junction Box	At least IP67
Cable	Symmetrical cable lengths > 1.4 m and 1.4 m, 4 mm ² solar cable
Diodes	3 Schottky Diodes
Connectors	MC4 or equivalent with IP67
Hail test (max. hailstorm)	Ø 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 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.

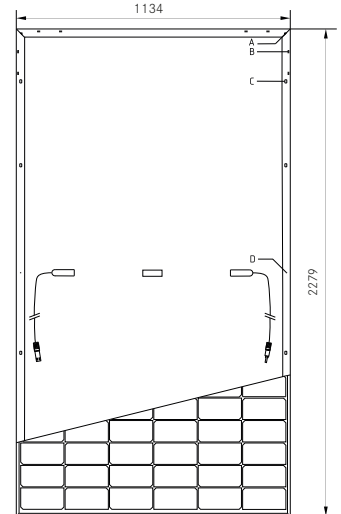
1 The specific warranty conditions are given under www.luxor.solar/downloads.html

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 dimensions of holes on request

Back - / Frontview³

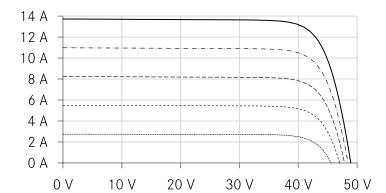


Drilled holes⁴

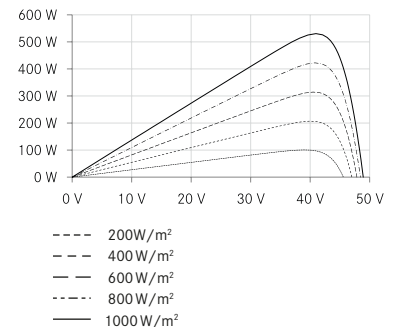
- A: 4 x drainage
- B: 16 x ventilation
- C: 8 x mounting
- D: 2 x earthing

Electrical characteristics

UI-diagram e.g. 540Wp



UP-diagram e.g. 540Wp



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

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