

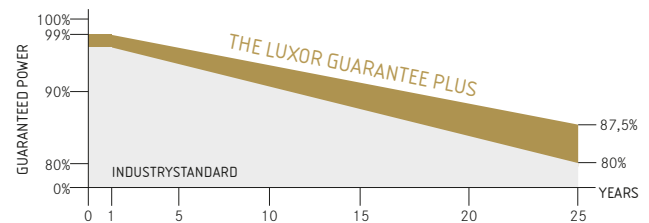
- + POWERFUL N-TYPE TOPCON CELLS
- + REDUCTION OF BALANCE-OF-SYSTEM-COSTS THROUGH HIGHER PERFORMANCE PER MODULE
- + ECO: ESPECIALLY ECONOMIC AND RELIABLE
- + APPLICATIONS: COMMERCIAL AND RESIDENTIAL POWER PLANTS
- + HIGH CLASS APPEARANCE: EASY INTEGRATION IN BUILDINGS



product guarantee<sup>1</sup>



linear performance guarantee<sup>1</sup>



## ECO LINE N-TYPE

## M108 / 410 - 430W

### MONOCRYSTALLINE N-TYPE MODULE FAMILY, FULLBLACK



Longlife tested



Power proofed



Safety provided



Selection of components



Cross-linking degree test



Performance surplus of 0 Wp to 6.49 Wp



PID free LID Free



Special packing to avoid micro cracks in the cells



German warrantor

# ECO LINE N-TYPE

## M108 / 410 - 430 W, FULLBLACK

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

### Electrical data at STC

Rated power Pmpp [Wp]	410.00	415.00	420.00	425.00	430.00
Pmpp range to	416.49	421.49	426.49	431.49	436.49
Rated current Impp [A]	13.20	13.28	13.36	13.44	13.52
Rated voltage Vmpp [V]	31.08	31.27	31.46	31.65	31.84
Short-circuit current Isc [A]	13.92	14.01	14.09	14.18	14.26
Open-circuit voltage Uoc [V]	37.63	37.86	38.09	38.32	38.55
Efficiency at STC up to	21.33%	21.58%	21.84%	22.10%	22.35%
Efficiency at 200 W/m <sup>2</sup>	20.78%	21.04%	21.29%	21.55%	21.81%

### Electrical data at NOCT

Power at Pmpp [Wp]	308.32	312.08	315.84	319.60	323.36
Rated current Impp [A]	10.66	10.72	10.78	10.85	10.91
Rated voltage Vmpp [V]	28.92	29.11	29.30	29.46	29.64
Short-circuit current Isc [A]	11.24	11.31	11.37	11.45	11.51
Open-circuit voltage Uoc [V]	34.73	34.96	35.18	35.40	35.63

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

### Limiting values

Max. system voltage   max. return current	1000 V or 1500 V   25 A
Safety class   Fire safety class	II   C (according to IEC 61730)
Operating Temperature	-40 up to 85°C
Max. tested pressure load-/tensile <sup>2</sup>	5400 Pa / 2400 Pa

### Temperature coefficient

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

Cells (matrix)   Dimenstions   Type	108 (6 x 18)   182 mm   N-Type TOPCon
Module dimensions (L x W x H) <sup>3</sup>   Weight	1722 mm x 1134 mm x 30 mm   21.5 kg
Front side	3.2 mm tempered, highly transparent, anti-reflection solar glass
Back side	Backsheet (black or white)
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 mm <sup>2</sup> 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 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.

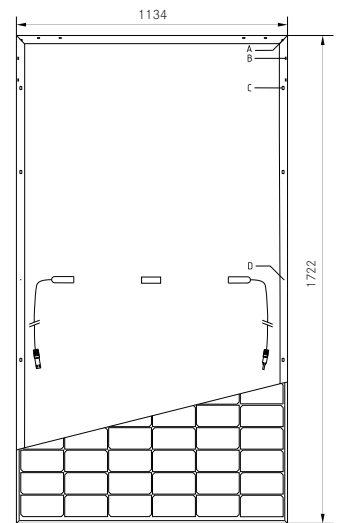
1 The specific warranty conditions are given under [www.luxor-solar.com/download.html](http://www.luxor-solar.com/download.html)

2 Horizontal mounted, for details please check mounting instruction

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

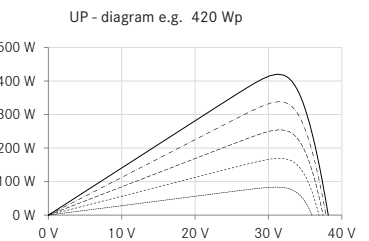
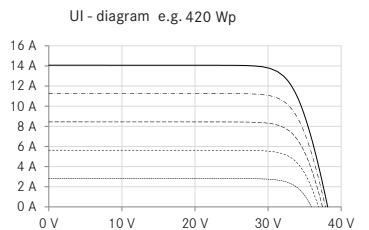
4 Location and dimensios of holes on request

### Back - / Frontview<sup>3</sup>



Drilled holes<sup>4</sup>  
 A: 4 x drainage  
 B: 16 x ventilation  
 C: 8 x mounting  
 D: 2 x earthing

### Electrical characteristics

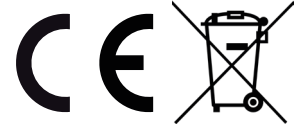


----- 200 W/m<sup>2</sup>  
 - - - - 400 W/m<sup>2</sup>  
 - - - - 600 W/m<sup>2</sup>  
 - - - - 800 W/m<sup>2</sup>  
 ——— 1000 W/m<sup>2</sup>

Luxor, your specialised company



**IEC**  
 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.com/downloads.html](http://www.luxor-solar.com/downloads.html)