



# ECO LINE HALF CELL BIFACIAL

## M144 / 525 - 545 W, TRANSPARENT

Monocrystalline module family

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

### Electrical data at STC

	525.00	530.00	535.00	540.00	545.00
Rated power Pmpp [Wp]	525.00	530.00	535.00	540.00	545.00
Pmpp range to	531.49	536.49	541.49	546.49	551.49
Rated current Impp [A]	12.92	13.00	13.07	13.15	13.22
Rated voltage Vmpp [V]	40.66	40.80	40.95	41.10	41.24
Short-circuit current Isc [A]	13.64	13.73	13.80	13.89	13.96
Open-circuit voltage Uoc [V]	48.75	48.92	49.10	49.28	49.45
Efficiency at STC up to	20.57%	20.76%	20.95%	21.15%	21.34%
Efficiency at 200 W/m <sup>2</sup>	20.07%	20.27%	20.45%	20.65%	20.83%

### Electrical data at NOCT

	389.76	393.47	397.18	400.90	404.61
Power at Pmpp [Wp]	389.76	393.47	397.18	400.90	404.61
Rated current Impp [A]	10.44	10.50	10.56	10.62	10.68
Rated voltage Vmpp [V]	37.34	37.47	37.62	37.74	37.89
Short-circuit current Isc [A]	11.01	11.08	11.14	11.21	11.28
Open-circuit voltage Uoc [V]	44.99	45.17	45.35	45.53	45.71

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

### Bifacial Gain\* (e.g. LX-440M/166-144+ BiF)

	5%	10%	15%	20%	25%
Backside power gain [Wp]	5%	10%	15%	20%	25%
Rated power Pmpp [Wp]	414.75	434.50	454.25	474.00	493.75
Rated current Impp [A]	10.10	10.58	11.06	11.54	12.02
Rated voltage Vmpp [V]	10.66	11.17	11.67	12.18	12.69
Short-circuit current Isc [A]	45.81	45.81	45.81	45.81	45.81
Open-circuit voltage Uoc [V]	40.30	40.30	40.30	40.30	40.30

\*depending on the reflection of the underlying surface

### Limiting values

Max. system voltage [V]	1500 V
Max. return current [I]	25 A
Operating Temperature	-40 to 85°C
Safety class	II
Max. tested pressure load [Pa] <sup>2</sup>	5400
Max. tested tensile load [Pa] <sup>2</sup>	2400

### Temperature coefficient

Temperature coefficient [V]   [I]   [P]	-0.285% /°C   0.055% /°C   -0.36% /°C
---	---------------------------------------

### Specifications

Number of cells (matrix)	144 (6 x 24)   182 mm x 91 mm
Module dimensions (L x W x H) <sup>3</sup>   Weight	2279 mm x 1134 mm x 35 mm   28,6 kg
Front-side glass	3.2 mm tempered, highly transparent, anti-reflection solar glass
Back sheet	Transparent
Frame	Stable, anodised aluminium frame
Junction Box	At least IP67
Cable	Symmetrical cable lengths > 1.3 m and 1.3 m, 4 mm <sup>2</sup> solar cable
Diodes	3 Schottky Diodes
Connectors	MC4 or equivalent (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.

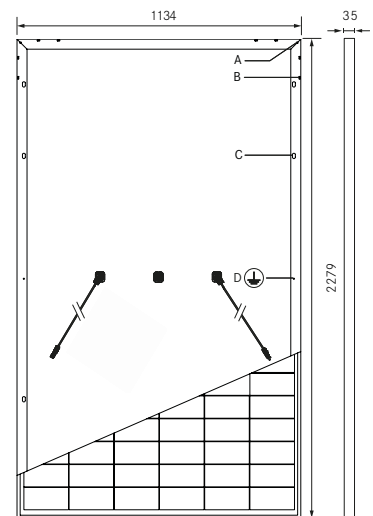
1 The specific warranty conditions are given under [www.luxor-solar.com/download.htm](http://www.luxor-solar.com/download.htm)

2 Horizontal mounted

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 reques

### Back - / Front - / Side view<sup>3</sup>

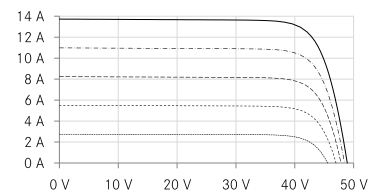


### Drilled holes<sup>4</sup>

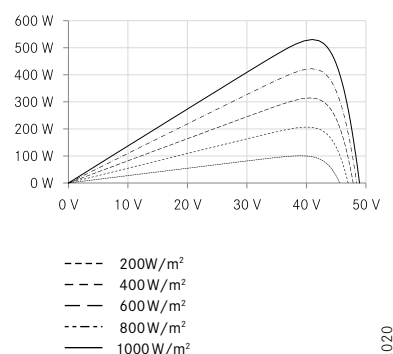
- A: 4 x drainage
- B: 8 x ventilation
- C: 12 x mounting
- D: 2 x earthing

### Electrical characteristics

UI-diagram e.g. LX-530M/182-144+



UP-diagram e.g. LX-530M/182-144+



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.htm](http://www.luxor-solar.com/downloads.htm)

Luxor, your specialised company