

- + REDUCED LOSSES DURING PARTIAL SHADING
- + HIGHER YIELD: MORE REFLECTION ON CELL SURFACE
- + APPLICATIONS: INDUSTRIAL AND COMMERCIAL POWER PLANTS
- + ECO: ESPECIALLY ECONOMIC AND RELIABLE
- + 9 BUS BAR HALF CUT CELL PERC TECHNOLOGY



product guarantee<sup>1</sup>



linear performance guarantee<sup>1</sup>



## ECO LINE HALF CELL

## M144 / 430 - 440 W

### MONOCRYSTALLINE MODULE FAMILY PERC



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 warranty

# ECO LINE HALF CELL M144 / 430 - 440 W PERC

Monocrystalline module family

Module type LX - XXXM/166-144+ | XXX = Rated power Pmpp

## Electrical data at STC

Rated power Pmpp [Wp]	430.00	435.00	440.00
Pmpp range to	436.49	441.49	446.49
Rated current Impp [A]	10.57	10.62	10.66
Rated voltage Vmpp [V]	40.69	41.00	41.31
Short-circuit current Isc [A]	11.16	11.21	11.26
Open-circuit voltage Uoc [V]	49.21	49.57	49.95
Efficiency at STC up to	19.62%	19.84%	20.07%
Efficiency at 200 W/m <sup>2</sup>	19.09%	19.32%	19.54%

## Electrical data at NOCT

Power at Pmpp [Wp]	317.43	321.76	325.84
Rated current Impp [A]	8.45	8.50	8.54
Rated voltage Vmpp [V]	37.56	37.87	38.16
Short-circuit current Isc [A]	9.01	9.05	9.09
Open-circuit voltage Uoc [V]	45.42	45.77	46.13

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 [V]	1000 V or 1500 V
Max. return current [I]	15 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   - 0.365 %/°C
---	--

## Specifications

Number of cells (matrix)	144 (6 x 24)   166 x 83 mm
Module dimensions (LxWxH) <sup>3</sup>   Weight	2115 mm x 1052 mm x 40 mm   24 kg
Front-side glass	3.2 mm tempered highly transparent, anti-reflection solar glass
Frame	stable, anodised aluminium frame
Junction Box	At least IP67
Cable	symmetrical cable lengths > 1.2 m and 1.2 m, 4 mm <sup>2</sup> solar cable
Diodes	3 Schottky Diodes
Plug-in connection	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.

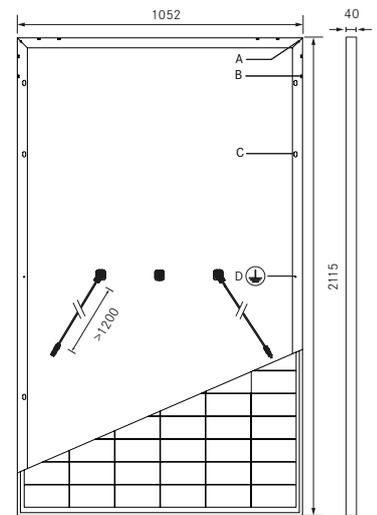
1 The specific warranty conditions are given under [www.luxor-solar.com/download.htm](http://www.luxor-solar.com/download.htm)

2 Horizontal mounted

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

4 Location and dimensions of holes on request

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

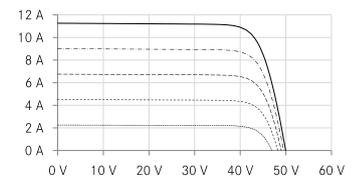


## Drilled holes<sup>4</sup>

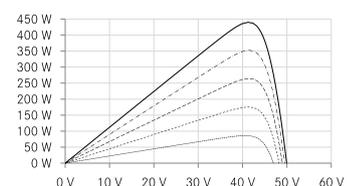
- A: 4 x drainage
- B: 16 x ventilation
- C: 8 x mounting
- D: 2 x earthing

## Electrical characteristics

UI-diagram e.g. LX-440M/166-144+



UP-diagram e.g. LX-440M/166-144+



- 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>

## GIMBORN TRADING SL

Ctra. Ulldecona nº20 Nave 2-B  
 12500 Vinaroz (Castellón) España

Tel +34 964 909 902 // Móvil +34 647 393 409

info@gimborntrading.com

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