

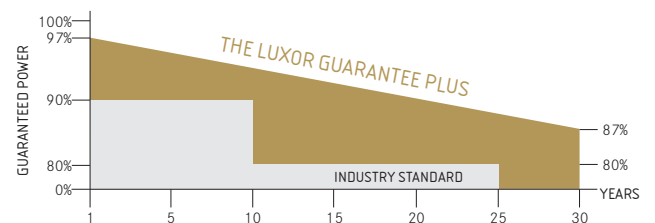
- + DOUBLE GLASS: HIGHER MECHANICAL STABILITY AND FIRE SAFETY
- + BIFACIAL: BETTER EFFICIENCY THROUGH DOUBLE-SIDED POWER GENERATION
- + APPLICATION: WHEREVER LONGEVITY AND ROBUSTNESS ARE REQUIRED
- + ECO: ESPECIALLY ECONOMIC AND RELIABLE



product guarantee<sup>1</sup>



linear performance guarantee<sup>1</sup>



## ECO LINE GLASS-GLASS BIFACIAL

### M60/ 290 - 310 W

#### MONOCRYSTALLINE MODULE FAMILY, TRANSPARENT



Longlife tested



Power proofed



Safety provided



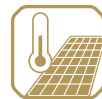
Selection of components



Back glass



Performance surplus of 0 Wp to 6.49 Wp



Higher heat dispensing



100% PID free cells



German warrantor

# ECO LINE GLASS-GLASS BIFACIAL M60/290 - 310 W

Monocrystalline module family

Module type LX - XXXM/156-60+ GG | XXX = Rated power Pmpp

## Electrical data at STC

Rated power Pmpp [Wp]	290.00	295.00	300.00	305.00	310.00
Pmpp range to	296.49	301.49	306.49	311.49	316.49
Rated current Impp [A]	9.26	9.32	9.38	9.44	9.50
Rated voltage Vmpp [V]	31.37	31.68	32.02	32.33	32.68
Short-circuit current Isc [A]	9.78	9.83	9.88	9.93	9.98
Open-circuit voltage Uoc [V]	38.50	38.70	38.89	39.08	39.28
Efficiency at STC up to	18.03%	18.33%	18.63%	18.94%	19.24%
Efficiency at 200 W/m <sup>2</sup>	17.25%	17.51%	17.78%	18.06%	18.34%

## Bifacial Gain\* (e.g. LX-300M/156-60+ GG)

Backside power gain [Wp]	5.00%	10.00%	15.00%	20.00%	25.00%
Rated power Pmpp [Wp]	315.00	330.00	345.00	360.00	375.00
Rated current Impp [A]	9.85	10.32	10.79	11.26	11.73
Rated voltage Vmpp [V]	32.02	32.02	32.02	32.02	32.02
Short-circuit current Isc [A]	10.37	10.87	11.36	11.86	12.35
Open-circuit voltage Uoc [V]	38.89	38.89	38.89	38.89	38.89

\*depending on the reflection of the underlying surface

## Electrical data at NOCT

Power at Pmpp [Wp]	214.58	217.95	221.68	225.18	228.89
Rated current Impp [A]	7.38	7.43	7.48	7.53	7.58
Rated voltage Vmpp [V]	29.06	29.33	29.64	29.91	30.21
Short-circuit current Isc [A]	7.80	7.84	7.88	7.92	7.96
Open-circuit voltage Uoc [V]	35.47	35.63	35.76 V	35.92	36.07

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

## Limiting values

Max. system voltage [V]	1000 V
Max. return current [I]	30 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]	-0.30% /°C   0.06% /°C   -0.40% /°C
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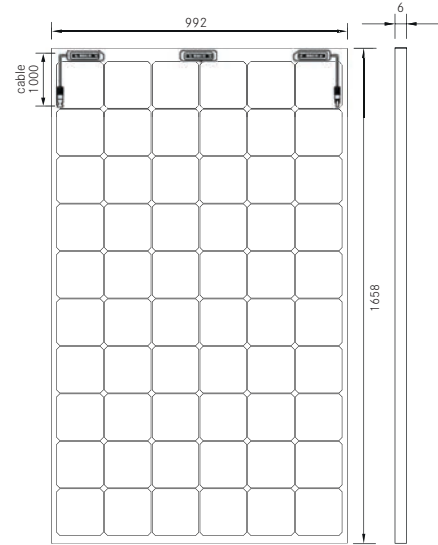
## Specifications

Number of cells (matrix)	60 (6 x 10), three strings in a row   156 mm x 156 mm
Module dimensions (L x W x H) <sup>3</sup>   Weight	1658 mm x 992 mm x 6 mm   23 kg
Front-side glass	2.5 mm tempered highly transparent, anti-reflection solar glass
Back-side glass	2.5 mm tempered highly transparent solar glass
Frame	frameless
Junction Box	At least IP67
Cable	Symmetrical cable lengths > 1.1 m and 1.1 m, 4 mm <sup>2</sup> solar cable
Diodes	3 Schottky Diodes 30A/45V
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.

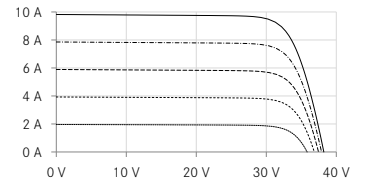
- The specific warranty conditions are given under [www.luxor-solar.com/download.htm](http://www.luxor-solar.com/download.htm)
- Horizontal mounted
- Tolerance L/W = +/- 3 mm. H +/-2mm, the dimensions given in the order confirmation will be decisive

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

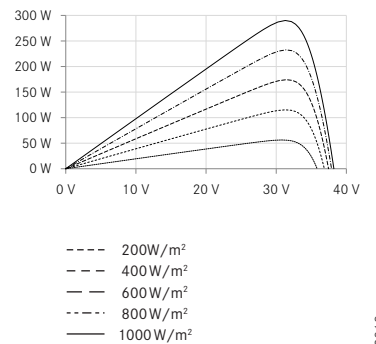


## Electrical characteristics

UI-diagram e.g. LX-290M/156-60+ GG



UP-diagram e.g. LX-290M/156-60+ GG



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