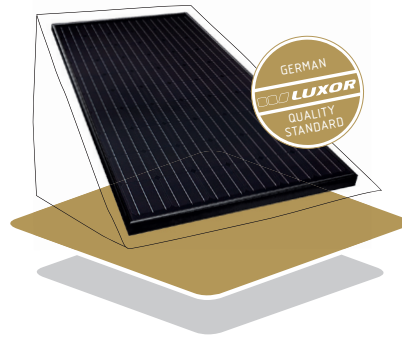




Optimized by  
**solar**edge



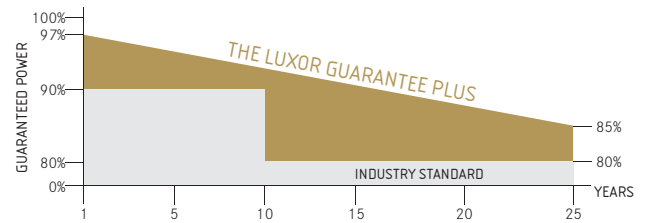
product guarantee<sup>1</sup>



linear performance guarantee<sup>1</sup>



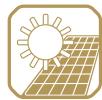
# ECO SMART LINE BLACK M60/280-300 W



## Monocrystalline module family



Longlife tested



Power proofed



Safety provided



Selection of components



Cross-linking degree test



Performance surplus of 0 Wp to 6.49 Wp



Imp sorting



Special packing to avoid micro cracks in the cells



German warrantor

The 60-cell module Eco Smart Line like every Luxor solar module has high-quality solar cells with highest efficiency at the best possible low light behaviour to ensure the best energy output. Using intelligent electronics that is integrated into the junction box, the Eco Smart Line modules have a better overall system yield, provide greater flexibility in system design, more safety and better transparency in system monitoring.

Mismatch losses that occur due to different roof inclinations or partial shading can be avoided thanks to the Maximum Power Point Tracking (MPPT). The smart electronics in the junction box ensures that each module delivers its maximum performance. Since the PV system has lesser BOS components, thanks to Eco Smart Line, the installation is quicker, easier and cheaper.

# ECO SMART LINE BLACK M60/280-300W



Monocrystalline module family

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

## Electrical data at STC

Rated power Pmpp [Wp]	280.00	285.00	290.00	295.00	300.00
Pmpp range to	286.49	291.49	296.49	301.49	306.49
Rated current Impp [A]	9.13	9.20	9.26	9.32	9.38
Rated voltage Vmpp [V]	30.76	31.06	31.37	31.68	32.02
Short-circuit current Isc [A]	9.69	9.74	9.78	9.83	9.88
Open-circuit voltage Uoc [V]	38.12	38.31	38.50	38.70	38.89
Efficiency at STC	17.26%	17.56%	17.85%	18.15%	18.46%
Efficiency at 200 W/m <sup>2</sup>	16.74%	16.98%	17.25%	17.51%	17.78%

## Electrical data at NOCT

Pmpp [Wp]	207.72	211.26	214.58	217.95	221.68
Rated current Impp [A]	7.29	7.34	7.38	7.43	7.48
Rated voltage Vmpp [V]	28.49	28.79	29.06	29.33	29.64
Short-circuit current Isc [A]	7.73	7.76	7.80	7.84	7.88
Open-circuit voltage Uoc [V]	35.19	35.32	35.47	35.63	35.76

Specification as per STC (Standard test conditions): irradiance 1000W/m<sup>2</sup> | module temperature 25°C | AM = 1,5  
 NOCT (nominal operating cell temperature): irradiance 800W/m<sup>2</sup> | wind speed 1m/sec | temperature 20°C | @45 +/- 2°C | AM = 1,5

## Limiting values

Max. system voltage [V]	1000 V
Max. return current [I]	15 A
Temperature range	-40 to 85°C
Snow-load zone <sup>2</sup>	approval up to SLZ 3 (according to DIN 1055)
Max. pressure load (static) [Pa]	5400
Max. dynamic load [Pa]	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)	6 x 10, three strings in a row   156 mm x 156 mm
Module dimensions (L x W x H) <sup>2</sup>   Weight	1640 mm x 992 mm x 40 mm   20.2 kg
Front-side glass	3.2 mm hardened solar glass with low iron content
Frame	stable, anodised aluminium frame in a hollow-section design
Socket	SolarEdge
Cabel	4 mm <sup>2</sup> solar cable, cable length 1.0 m
Diodes	3 Schottky Diodes 15A/45V
Plug-in connection	high-quality plug-in system, (IP67) MC4 or equivalent
Hail test (max. hailstorm)	∅ 45 mm   impact velocity 23 m/s

The specifications and average values can vary slightly. What is important is the corresponding data of the individual measurement. Specifications are subject to change without notice. Measurement tolerance: rated power +/- 3%, other values +/- 10%, all information in this data sheet corresponds to DIN 50380. A potential light-induced degradation of the power after commissioning is not considered here, other information can be found in the installation guidelines.

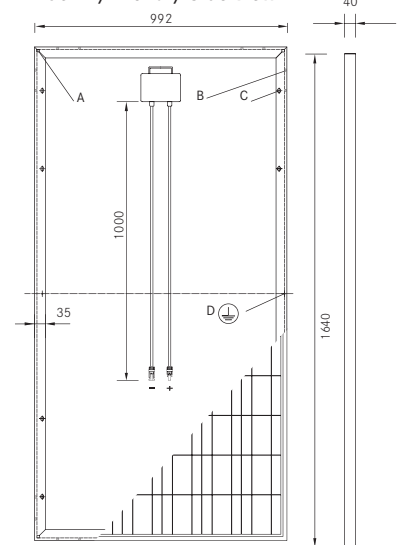
1 The specific warranty conditions are given under [www.luxor-solar.com/download.htm](http://www.luxor-solar.com/download.htm)

2 For standing installation

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

4 Location on request

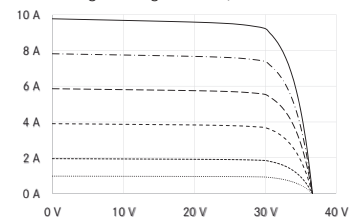
## Back - / Front -/ Side view<sup>3</sup>



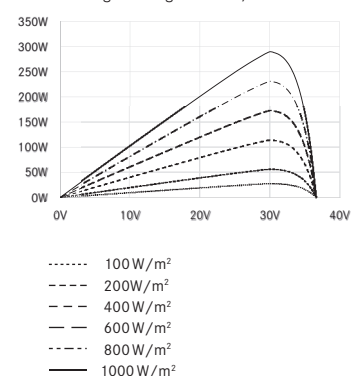
- A: 4 x drainage 10\*10 mm
- B: 8 x ventilation aperture 3\*7 mm
- C: 8 x mounting hole<sup>4</sup> d = 7 mm
- D: 2 x earthing d = 2 mm

## Electrical characteristics

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



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



Luxor, your specialised company



Guidelines: 2006/95/EG-2006/95/EC, 89/336/EWG-89/336/EEC, 93/68/EWG-93/68/EEC



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)