

product guarantee¹

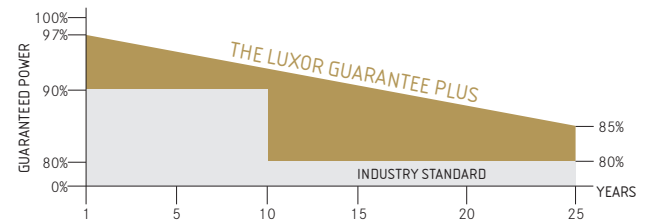


linear performance guarantee¹

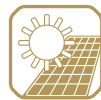


ECO LINE FULL BLACK M60/ 290 - 310 W

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

Eco Line Full Black is the aesthete among the Luxor solar modules. The high quality look and the homogeneous appearance increase the attractiveness of buildings. The module offers better visual integration without compromising on quality. Eco in this case means especially economical. High-quality solar cell with highest efficiency at the best possible low light behaviour ensure the best energy output. And this at plus tolerances of 0 Wp to 6.49 Wp.

Further high-end components: An especially durable plug-in connection guarantees the best power contact under all conditions, and the hollow-section frame made of anodised aluminium and compatible with every assembly system, is torsionally stiff and corrosion-free. Manufactured according to German standards and each Luxor solar module is marked by a special level of durability and reliability.

ECO LINE FULL BLACK M60/290 - 310 W

Monocrystalline module family

Module type LX - XXXM/156-60+ | 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 | 17.85% | 18.15% | 18.46% | 18,76% | 19.09% |
| Efficiency at 200 W/m ² | 17.25% | 17.51% | 17.78% | 18,06% | 18.34% |

Electrical data at NOCT

| | | | | | |
|-------------------------------|--------|--------|---------|--------|--------|
| 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 1000 W/m² | module temperature 25°C | AM = 1,5

NOCT (nominal operating cell temperature): irradiance 800 W/m² | wind speed 1 m/sec | temperature 20°C | @45 +/- 2°C | AM = 1,5

Limiting values

| | |
|----------------------------------|--|
| Max. system voltage [V] | 1000 V |
| Max. return current [I] | 15 A |
| Operating Temperature | -40 to 85°C |
| Snow-load zone ² | 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 |
|---|-------------------------------------|

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) ³ Weight | 1640 mm x 992 mm x 35 mm 18.5 kg |
| Front-side glass | 3.2 mm hardened solar glass with low iron content |
| Frame | stable, anodised aluminium frame in a hollow-section design |
| Junction Box | At least IP65 |
| Cable | 4 mm ² solar cable, cable length 1.0 m |
| Diodes | 3 Schottky Diodes 15A/45V |
| Plug-in connection | MC4 or equivalent (IP67) |
| Hail test (max. hailstorm) | ∅ 45 mm impact velocity 23 m/s ± 83 km/h |

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.

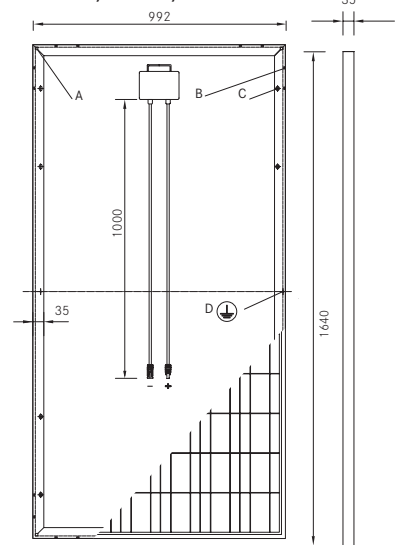
1 The specific warranty conditions are given under www.luxor-solar.com/download.htm

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

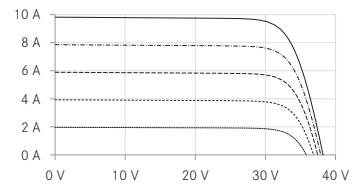
Back - / Front -/ Side view³



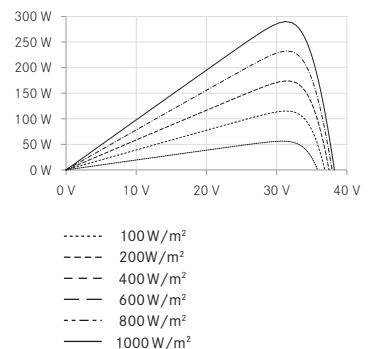
- A: 4 x drainage 10*10 mm
- B: 8 x ventilation aperture 3*7 mm
- C: 8 x mounting hole⁴ d = 7 mm
- D: 2 x earthing d = 2 mm

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