



product guarantee¹



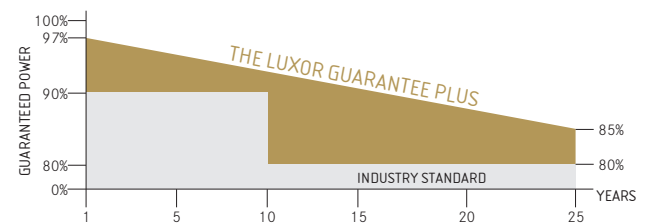
linear performance guarantee¹



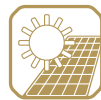
ECO LINE

M60/280 – 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

The 60-cell module is the large-size all-rounder among the Luxor solar modules. Eco in this case means especially economical: The high wattage makes the module the ideal solution for industrial scale equipments. From the open-field facilities, through the tracking system, to the roof-mounted installation. High-quality solar cell with an efficiency up to 21.0% at the best possible low light behaviour ensure the best energy output. And this at plus tolerances of 0 Wp to 6.49 Wp.

Exemplary in the manufacturing quality, too: 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 each Luxor photovoltaic module is marked by a special level of durability and reliability.

ECO LINE M60/280 - 310 W

Monocrystalline module family

Electrical data	LX-280M	LX-290M	LX-300M	LX-310M
Rated power P _{mpp} [Wp]	280.00	290.00	300.00	310.00
P _{mpp} range from	280.00	290.00	300.00	310.00
P _{mpp} range to	286.49	296.49	306.49	316.49
Rated current I _{mpp} [A]	8.80	9.04	9.28	9.50
Rated voltage V _{mpp} [V]	31.86	32.12	32.38	32.64
Short-circuit current I _{sc} [A]	9.20	9.39	9.59	9.76
Open-circuit voltage U _{oc} [V]	38.24	38.60	38.96	39.23
Efficiency at STC	17.24%	17.85%	18.47%	19.06%
Efficiency at 200 W/m ²	16.78%	17.36%	17.97%	18.55%
NOCT [°C]	45 ± 2°C	45 ± 2°C	45 +/- 2°C	45 +/- 2°C

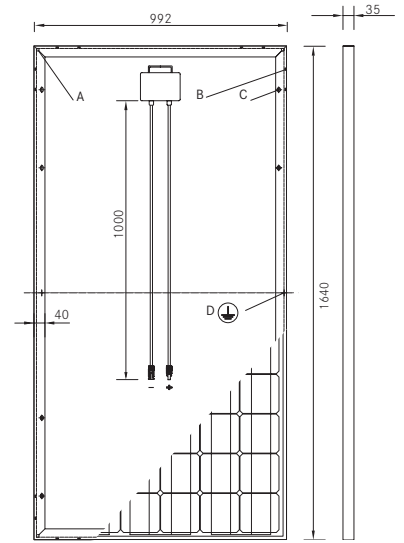
Specification as per STC (Standard test conditions): irradiance 1000 W/m² | module temperature 25°C | AM = 1.5
 NOCT (nominal operating cell temperature): irradiance 800 W/m² | wind speed 1 m/sec | temperature 20°C | AM = 1.5

Limiting values	LX-280M / LX-290M / LX-300M / LX-310M
Max. system voltage [V]	1000 V
Max. return current [I]	20 A
Temperature range	-40 to 85°C
Snow-load zone ²	approval up to SLZ 3 (according to DIN 1055)
Max. pressure load (static)	5400 Pa

Temperature coefficient	LX-280M / LX-290M / LX-300M / LX-310M
Temperature coefficient [V] [I] [P]	-0.34 % /°C 0.05 % /°C -0.45 % /°C

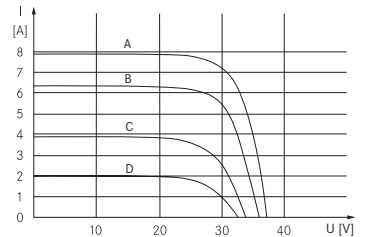
Specifications	LX-280M / LX-290M / LX-300M / LX-310M
Number of cells (matrix)	6 x 10, three strings in a row
Cell size	156 mm x 156 mm (diagonal: 200 mm)
Module dimensions (L x W x H) ² Weight	1,640 mm x 992 mm x 35 mm 18.5 kg
Front-side glass	3.2 mm hardened solar glass with low iron content
Frame	stable, anodised aluminium frame in a hollow-section design
Socket	plastic (PPO), IP67, strain-relieved
Diodes	3 Schottky Diodes 20A
Cable	4 mm ² solar cable, cable length 1.0 m
Plug-in connection	high-quality plug-in system, (IP67) MC4 or equivalent
Hail test (max. hailstorm)	∅ 45 mm impact velocity 23 m/s
Salt mist corrosion test	classified according to IEC 61701:2011 ed.2
General technical approval	classified according to DIN EN 13501-5 as B _{ROOF} (ti)

Back view/ Front view/ Side view³

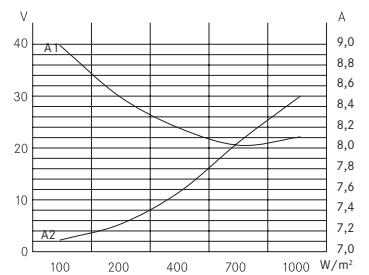


- A: 4 x drainage 10*10 mm
- B: 8 x ventilation aperture 3*7 mm
- C: 8 x mounting hole⁴ d = 7 mm
- D: 2 x earthing d = 2 mm

Characteristics



A: 1000 W/m² | B: 800 W/m² | C: 600 W/m² | D: 200 W/m²



A1: I_{mpp} | A2: V_{mpp}

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

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