Solar Module
Manufacturer
Since 2004

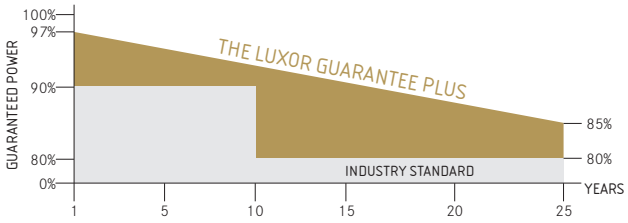
LUXOR
the sunshine people

15 YEARS
product guarantee[1]

25 YEARS
linear performance guarantee[1]

ECO LINE HALF CELLS
M120 / 310-330 W

Monocrystalline module family



Longlife tested

- Selection of components
- Cross-linking degree test

Power proofed

- Performance surplus of 0 Wp to 6.49 Wp
- Impp sorting

Safety provided

- Special packing to avoid micro cracks in the cells
- German warrantor

The 120-cell module with half-cell architecture increase power output of the solar module by lowering resistive power and increasing total reflection. This module is the ideal solution for industrial scale equipment. From the open-field facilities, through the tracking system, to the roof-mounted installation. 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 0Wp to 6.49Wp.

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 standard s each Luxor solar module is marked by a special level of durability and reliability.

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ECO LINE HALF CELLS M120 / 310-330 W

Monocrystalline module family | Module type LX - XXXM/156-120+ | XXX = Rated power Pmpp

Electrical data at STC

Rated power Pmpp [Wp]	310.00	315.00	320.00	325.00	330.00
Pmpp range to	316.49	321.49	326.49	331.49	336.49
Rated current Impp [A]	9.35	9.41	9.47	9.53	9.59
Rated voltage Vmpp [V]	33.21	33.51	33.83	34.14	34.46
Short-circuit current Isc [A]	9.79	9.85	9.92	9.98	10.04
Open-circuit voltage Uoc [V]	39.48	39.85	40.22	40.60	40.97
Efficiency at STC up to	19.05%	19.35%	19.65%	19.95%	20.25%
Efficiency at 200 W/m²	17.94%	18.27%	18.60%	18.95%	19.29%

Electrical data at NOCT

Pmpp [Wp]	229.13	233.06	237.05	241.10	245.20
Rated current Impp [A]	7.48	7.53	7.59	7.64	7.70
Rated voltage Vmpp [V]	30.65	30.96	31.25	31.54	31.84
Short-circuit current Isc [A]	7.90	7.95	8.01	8.06	8.11
Open-circuit voltage Uoc [V]	36.44	36.79	37.15	37.51	37.87

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]	25 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

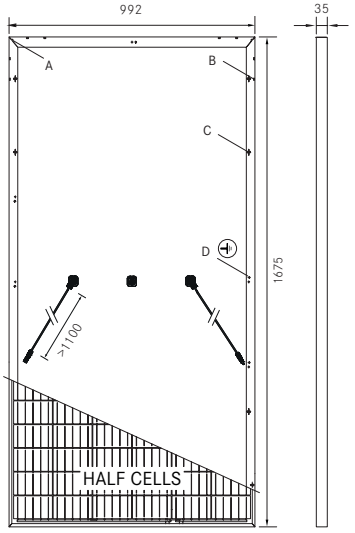
Temperature coefficient

Temperature coefficient [V] | [I] | [P]	-0.3% /°C | 0.055% /°C | -0.4% /°C

Specifications

Number of cells (matrix)	120 (6 x 20) I 156 mm x 78 mm
Module dimensions (L x W x H)[3] | Weight	1675 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	IP68 rated
Cable	symmetrical cable lengths > 1.1 m and 1.1 m, 4 mm²
Diodes	3 Schottky Diodes
Connectors	MC4 or equivalent (IP67)
Hail test (max. hailstorm)	ø 45 mm | impact velocity 23 m/s ≙ 83 km/h

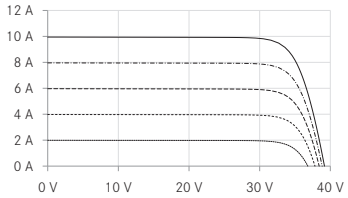
Back - / Front -/ Side view[3]



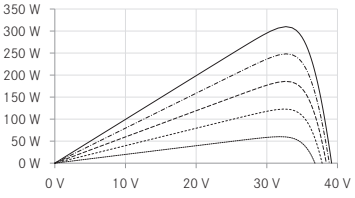
A: 4 x drainage 10*10 mm
B: 8 x ventilation aperture 3*7 mm
C: 8 x mounting hole[4] d = 2 mm
D: 2 x earthing d = 2 mm

Electrical characteristics

UI-diagramm e.g. LX-310M/156-120+



UP-diagramm e.g. LX-310M/156-120+



200 W/m²
400 W/m²
600 W/m²
800 W/m²
1000 W/m²

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

IEC 61215
IEC 61730

The validity of the certificates/listings for a specific country has to be examined under:
www.luxor-solar.com/download.htm