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**Solar Panel Guide
Specification Data Sheet**

**Luxor Solar GmbH
Eco Line Half Cells P120/280-300W
LX-300P**

Also available on the web at
EnergyPal.com/luxor-solar-gmbh-solar-panels/lx-300p



product guarantee¹



linear performance
guarantee¹



ECO LINE HALF CELLS P120 / 280-300 W

Polycrystalline module family



Longlife tested



Power proofed



Safety provided



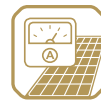
Selection of
components



Cross-linking
degree test



Performance surplus
of 0Wp to 6.49 Wp



Imp
sorting



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.

ECO LINE HALF CELLS P120 / 280-300 W

Polycrystalline module family

Module type LX - XXXP/156-120+ | XXX = Rated power P_{mp}

Electrical data at STC

Rated power P _{mp} [Wp]	280.00	285.00	290.00	295.00	300.00
P _{mp} range to	286.49	291.49	296.49	301.49	306.49
Rated current I _{mp} [A]	8.85	8.94	9.03	9.11	9.20
Rated voltage V _{mp} [V]	31.69	31.92	32.16	32.41	32.65
Short-circuit current I _{sc} [A]	9.37	9.46	9.56	9.64	9.74
Open-circuit voltage U _{oc} [V]	38.88	39.17	39.47	39.76	40.06
Efficiency at STC up to	17.24%	17.54%	17.84%	18.14%	18.45%
Efficiency at 200 W/m ²	16.62%	16.96%	17.30%	17.63%	17.99%

Electrical data at NOCT

P _{mp} [Wp]	207.79	211.77	215.80	219.64	223.78
Rated current I _{mp} [A]	7.08	7.15	7.23	7.31	7.39
Rated voltage V _{mp} [V]	29.37	29.61	29.84	30.06	30.29
Short-circuit current I _{sc} [A]	7.56	7.64	7.72	7.79	7.86
Open-circuit voltage U _{oc} [V]	35.89	36.17	36.45	36.74	37.02

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
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Specifications

Number of cells (matrix)	120 (6 x 20) 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 mm ²
Diodes	3 Schottky Diodes
Connectors	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.

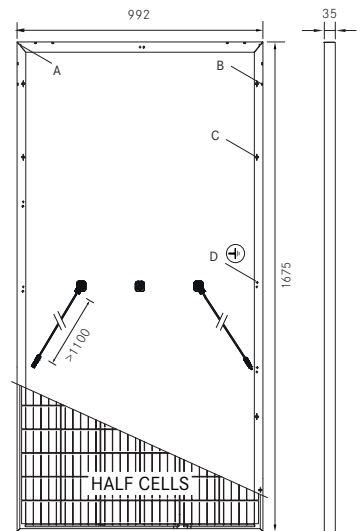
1 The specific warranty conditions are given under www.luxor-solar.com/download.htm

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

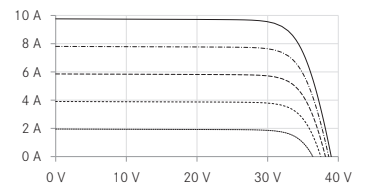
B: 8 x ventilation aperture 3° 7 mm

C: 8 x mounting hole⁴ d = 2 mm

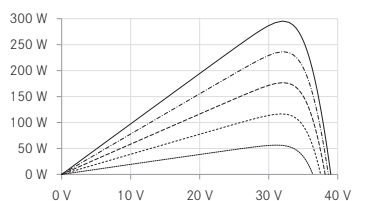
D: 2 x earthing d = 2 mm

Electrical characteristics

UI-diagram e.g. LX-290P/156-120+



UP-diagram e.g. LX-290P/156-120+



----- 200 W/m²

--- 400 W/m²

— 600 W/m²

- - - 800 W/m²

— 1000 W/m²

Luxor, your specialised company

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



IEC
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