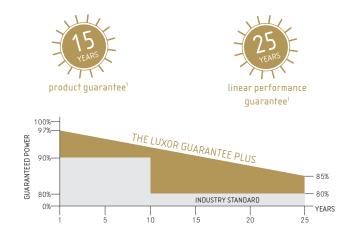




- + HIGHER POWER YIELD: REDUCTION OF INTERNAL RESISTANCE
- + REDUCED LOSSES DURING PARTIAL SHADING
- + HIGH CLASS APPEARANCE: EASY INTEGRATION IN BUILDINGS
- + APPLICATIONS: INDUSTRIAL, COMMERCIAL AND RESIDENTIAL POWER PLANTS
- + ECO: ESPECIALLY ECONOMIC AND RELIABLE



# ECO LINE HALF CELL FULL BLACK M120 / 305 - 325 W

### MONOCRYSTALLINE MODULE FAMILY



Longlife tested



Selection of components



Cross-linking degree test



Power proofed



Performance surplus of 0 Wp to 6.49 Wp



free cells



Safety provided



Special packing to avoid micro cracks in the cells



German warrantor

# ECO LINE HALF CELL FULL BLACK M120 / 305 - 325 W

| Monocrystalline module family | Module type LX - XXXM/156-120+   XXX = Rated power Pmpp |        |        |        |        |
|-------------------------------|---|--------|--------|--------|--------|
| Electrical data at STC        |   |        |        |        |        |
| Rated power Pmpp [Wp]         | 305.00  | 310.00 | 315.00 | 320.00 | 325.00 |
| Pmpp range to                 | 311.49  | 316.49 | 321.49 | 326.49 | 331.49 |
| Rated current Impp [A]        | 9.29  | 9.35   | 9.42   | 9.48   | 9.55   |
| Rated voltage Vmpp [V]        | 32.88   | 33.18  | 33.48  | 33.78  | 34.08  |
| Short-circuit current Isc [A] | 9.73  | 9.79   | 9.86   | 9.93   | 10.00  |
| Open-circuit voltage Uoc [V]  | 39.10   | 39.45  | 39.81  | 40.17  | 40.53  |
| Efficiency at STC up to       | 18.75%  | 19.05% | 19.35% | 19.65% | 19.95% |
| Efficiency at 200 W/m²        | 17.88%  | 18.18% | 18.50% | 18.80% | 19.13% |
| Electrical data at NOCT       |   |        |        |        |        |
| Power at Pmpp [Wp]            | 225.45  | 229.26 | 233.37 | 237.29 | 241.52 |
| Rated current Impp [A]        | 7.43  | 7.48   | 7.55   | 7.60   | 7.67   |
| Rated voltage Vmpp [V]        | 30.35   | 30.65  | 30.93  | 31.21  | 31.49  |
| Short-circuit current Isc [A] | 7.85  | 7.90   | 7.96   | 8.02   | 8.08   |
| Open-circuit voltage Uoc [V]  | 36.09   | 36.43  | 36.77  | 37.11  | 37.46  |

Specification as per STC (Standard test conditions): irradiance  $1000 \, \text{W/m}^2$  | module temperature  $25^{\circ}\text{C}$  | Air Mass = 1.5 NOCT (nominal operating cell temperature): irradiance  $800 \, \text{W/m}^2$  | wind speed  $1 \, \text{m/sec}$  | ambient temperature  $20^{\circ}\text{C}$  | cell operating temperature  $45 \, \text{+/-}2^{\circ}\text{C}$  | Air Mass = 1.5

#### Limiting values

| Max. system voltage [V]                     | 1000 V or 1500 V |
|---|------------------|
| Max. return current [I]                     | 15 A             |
| Operating Temperature                       | -40 to 85°C      |
| Safety class                                | II               |
| Max. tested pressure load [Pa] <sup>2</sup> | 5400             |
| Max. tested tensile load [Pa] <sup>2</sup>  | 2400             |

## Temperature coefficient

| Temperature coefficient [V]   [I]   [P] | -0.30% /°C   0.055% /°C   -0.40% /°C |
|---|--------------------------------------|
|---|--------------------------------------|

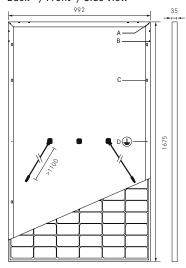
#### **Specifications**

| •                                   |   |
|-------------------------------------|---|
| Number of cells (matrix)            | 120 (6 x 20) I 156 mm x 78 mm                                   |
| Module dimensions (LxWxH)³   Weight | 1675 mm x 992 mm x 35 mm   18.5 kg                              |
| Front-side glass                    | 3.2 mm tempered highly transparent, anti-reflection solar glass |
| Frame                               | stable, anodised aluminium frame                                |
| Junction Box                        | At least IP67   |
| Cable                               | symmetrical cable lengths > 1.1 m and 1.1 m, 4 mm² solar cable  |
| Diodes                              | 3 Schottky Diodes   |
| Plug-in connection                  | MC4 or equivalent (IP67)  |
| Hail test (max. hailstorm)          | Ø 45 mm   impact velocity 23 m/s ≙ 83 km/h                      |

The specifications and average values can vary slightly. Relevant is the corresponding data of the individual measurement. Specifications are subject to change without notice. Measurement tolerance depending on equipment: rated power +/- 3%, other values +/- 10%. All information given in this data sheet correspondes to DIN EN 50380. A potential light-induced degradation of the power after commissioning is not considered here. Further information in the installation manuals.

- 1 The specific warranty conditions are given under www.luxor-solar.com/download.htm
- 2 Horizontal mounted 3 Tolerance L/W = +/- 3 mm. H +/-2mm, the dimensions given in the order confirmation will be decisive
- 4 Location and dimensions of holes on request

#### Back - / Front -/ Side view3



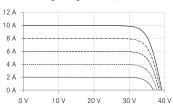
Drilled holes4

B: 16 x ventilation

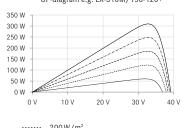
C: 8 x mounting D: 2 x earthing

#### **Electrical characteristics**

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



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



200 W/m<sup>2</sup>  $400\,W/m^2$ 600 W/m<sup>2</sup> 800 W/m<sup>2</sup> 1000 W/m<sup>2</sup>

Luxor, your specialised company









Guidelines: 93/68/EEC 2014/35/EU, (LVD) 2014/30/EU, (EMC)

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