

LP182*182-M-54-MH

Rated Power 400-415W



MBB Cell
New circuit design, lower internal current, lower internal resistance loss.



Low Light Features
Higher performance under low light environment.



Higher Output Power
Module adopts 108 pcs of 182*182mm half cells, the maximum power can reach 415W.



PID Protection
Ensure the attenuation probability caused by PID phenomenon is minimized

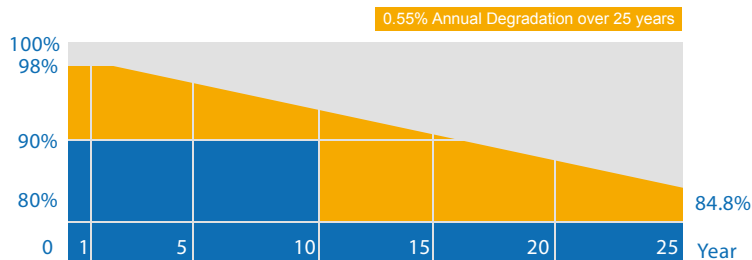


Harsh Environmental Adaptability
Strict salt spray and ammonia corrosion test by TUV Nord.



Load Capacity
Mechanical load tests including wind load 2400 Pa and snow load 5400 Pa done by TUV Nord.

Leapton Linear Power Warranty Industry Warranty



Headquarter : Leapton Energy Co., Ltd.

Tosei Bldg. 6F, 1-2-1 Aioi-cho, Chuo-ku Kobe-shi, Hyogo, 650-0025, Japan

+81-78-382-3182

www.leaptonenergy.jp

Manufacturer : Leapton Solar (Changshu) Co., Ltd

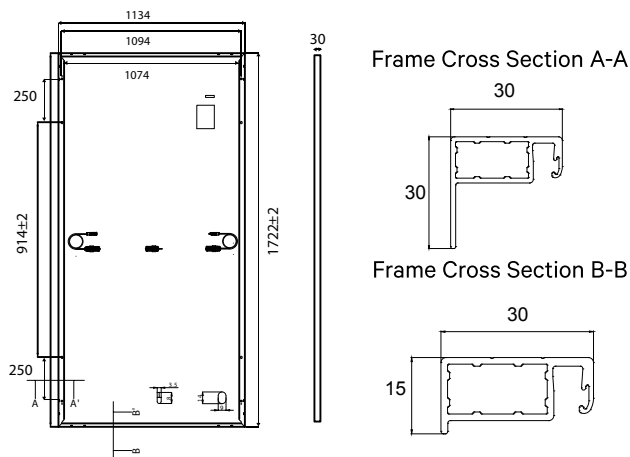
No.9, Sunshine Avenue, Changshu City, Jiangsu, China

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MECHANICAL DIAGRAMS



SPECIFICATIONS

Weight	21kg
Dimensions	1722±2mm*1134mm*30mm
Cell Dimensions	182*182mm
Cell Amount	54*2 pcs
Maximum System Voltage	1500V
Junction Box	IP68
Frame	Aluminum Alloy
Cable	4mm ² , N 1100mm/P 1100mm or customized length
Connector	MC4 compatible
Application Level	Class A

ELECTRICAL PARAMETERS AT STC

Power	400W	405W	410W	415W
Open Circuit Voltage	36.94V	37.14V	37.34V	37.54V
Short Circuit Current	13.60A	13.65A	13.70A	13.75A
Maximum Power Voltage	30.92V	31.12V	31.32V	31.62V
Maximum Power Current	12.94A	13.00A	13.06A	13.12A
Module Efficiency	20.5%	20.7%	21.0%	21.3%

* Under Standard Test Conditions (STC) of irradiance of 1000 W/m², spectrum AM 1.5 and cell temperature of 25°C.

ELECTRICAL PARAMETERS AT NMOT

Power	299W	303W	307W	311W
Open Circuit Voltage	34.72V	34.91V	35.10V	35.29V
Short Circuit Current	11.17A	11.26A	11.34A	11.42A
Maximum Power Voltage	28.75V	28.94V	29.13V	29.40V
Maximum Power Current	10.40A	10.47A	10.54A	10.58A
Module Efficiency	15.3%	15.5%	15.7%	15.9%

* Under Nominal Module Operating Temperature (NMOT), irradiance of 800 W/m², spectrum AM 1.5, ambient temperature 20°C, wind speed 1 m/s.

TEMPERATURE CHARACTERISTICS

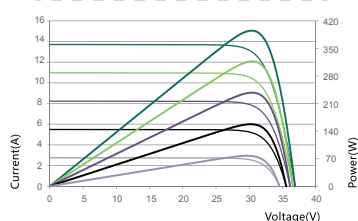
NMOT	41±3°C	Temp Coefficient of ISC	+0.05%/°C
Temp Coefficient of VOC	-0.28%/°C	Temp Coefficient of Pmax	-0.36%/°C

PACKING CONFIGURATION

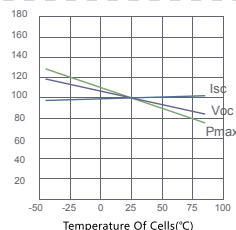
Modules/Pallet	36 Pieces	Modules/40' Container	936 Pieces
Packing Description	26 Pallets, Total=(36+36)x13=936 Pieces		

CHARACTERISTICS

LP182*182-M-54-MH-400W



LP182*182-M-54-MH-400W



MAXIMUM RATING

Output Tolerance	0~+5W
Operating Temperature	-40°C~+85°C
Wind Load/Snow Load	2400pa/5400pa
Fuse Current	25A



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LEAPTON
SOLAR

Monofacial

Bifacial

LP182*182-M-60-MH

Rated Power 450-465W



MBB Cell

New circuit design, lower internal current, lower internal resistance loss.



Low Light Features

Higher performance under low light environment.



Higher Output Power

Module adopts 120 pcs of 182*182mm half cells, the maximum power can reach 465W.



PID Protection

Ensure the attenuation probability caused by PID phenomenon is minimized



Harsh Environmental Adaptability

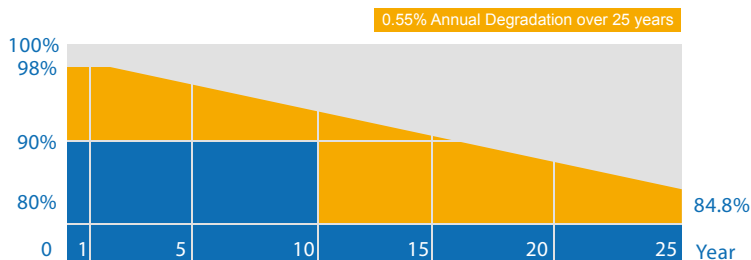
Strict salt spray and ammonia corrosion test by TUV Nord.



Load Capacity

Mechanical load tests including wind load 2400 Pa and snow load 5400 Pa done by TUV Nord.

Leapton Linear Power Warranty Industry Warranty



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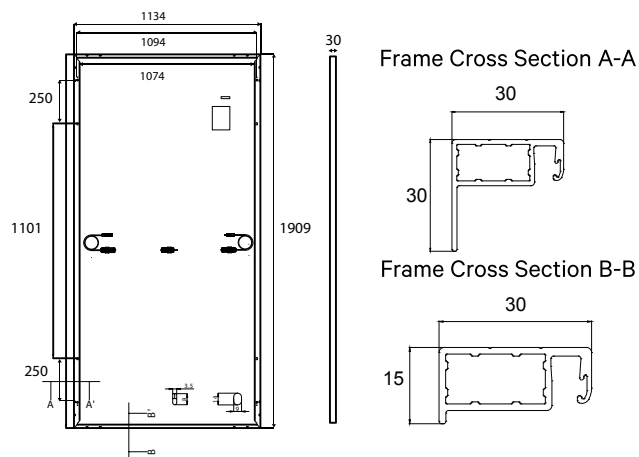
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MECHANICAL DIAGRAMS



SPECIFICATIONS

Weight	23kg
Dimensions	1909mm*1134mm*30mm
Cell Dimensions	182*182mm
Cell Amount	60*2 pcs
Maximum System Voltage	1500V
Junction Box	IP68
Frame	Aluminum Alloy
Cable	4mm ² , N 1200mm/P 1200mm or customized length
Connector	MC4 compatible
Application Level	Class A

ELECTRICAL PARAMETERS AT STC

Power	450W	455W	460W	465W
Open Circuit Voltage	41.40V	41.60V	41.80V	42.00V
Short Circuit Current	13.68A	13.73A	13.78A	13.83A
Maximum Power Voltage	34.70V	34.90V	35.20V	35.40V
Maximum Power Current	12.96A	13.02A	13.08A	13.14A
Module Efficiency	20.79%	21.02%	21.25%	21.48%

* Under Standard Test Conditions (STC) of irradiance of 1000 W/m², spectrum AM 1.5 and cell temperature of 25°C.

ELECTRICAL PARAMETERS AT NMOT

Power	337W	341W	344W	348W
Open Circuit Voltage	38.92V	39.10V	39.29V	39.48V
Short Circuit Current	11.23A	11.31A	11.34A	11.41A
Maximum Power Voltage	32.28V	32.45V	32.73V	32.93V
Maximum Power Current	10.44A	10.51A	10.51A	10.57A
Module Efficiency	15.57%	15.75%	15.89%	16.08%

* Under Nominal Module Operating Temperature (NMOT), irradiance of 800 W/m², spectrum AM 1.5, ambient temperature 20°C, wind speed 1 m/s.

TEMPERATURE CHARACTERISTICS

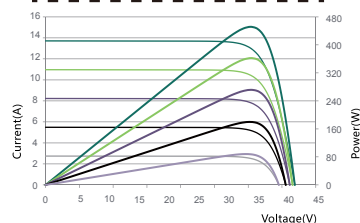
NMOT	41±3°C	Temp Coefficient of ISC	+0.05%/°C
Temp Coefficient of VOC	-0.28%/°C	Temp Coefficient of Pmax	-0.36%/°C

PACKING CONFIGURATION

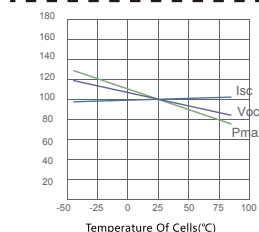
Modules/Pallet	36 Pieces	Modules/40' Container	864 Pieces
Packing Description	24 Pallets, Total=(36+36)x12=864 Pieces		

CHARACTERISTICS

LP182*182-M-60-MH-460W



LP182*182-M-60-MH-460W



MAXIMUM RATING

Output Tolerance	0~+5W
Operating Temperature	-40°C~+85°C
Wind Load/Snow Load	2400pa/5400pa
Fuse Current	25A

25 YEARS Quality Warranty

25 YEARS Power Warranty

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LP182*182-M-72-MH

Rated Power 540-560W



MBB Cell
New circuit design, lower internal current, lower internal resistance loss.



Low Light Features
Higher performance under low light environment.



Higher Output Power
Module adopts 144 pcs of 182*182mm half cells, the maximum power can reach 560W.



PID Protection
Ensure the attenuation probability caused by PID phenomenon is minimized



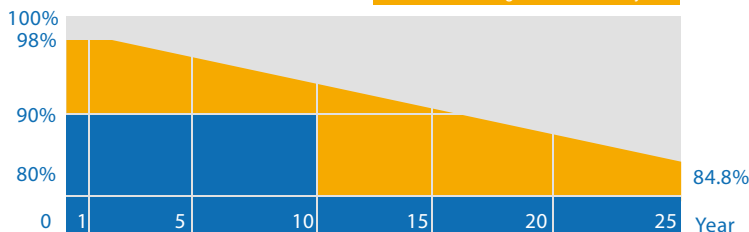
Harsh Environmental Adaptability
Strict salt spray and ammonia corrosion test by TUV Nord.



Load Capacity
Mechanical load tests including wind load 2400 Pa and snow load 5400 Pa done by TUV Nord.

Leapton Linear Power Warranty Industry Warranty

0.55% Annual Degradation over 25 years



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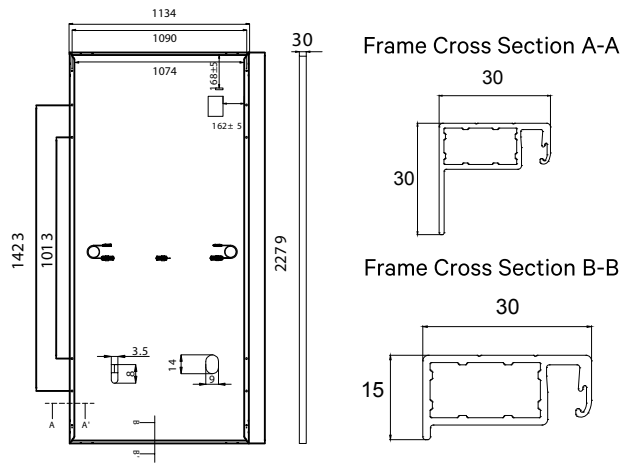
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MECHANICAL DIAGRAMS



SPECIFICATIONS

Weight	27kg
Dimensions	2279mm*1134mm*30mm
Cell Dimensions	182*182mm
Cell Amount	72*2 pcs
Maximum System Voltage	1500V
Junction Box	IP68
Frame	Aluminum Alloy
Cable	4mm ² , N 1400mm/P 1400mm or customized length
Connector	MC4 compatible
Application Level	Class A

ELECTRICAL PARAMETERS AT STC

Power	540W	545W	550W	555W	560W
Open Circuit Voltage	49.40V	49.60V	49.80V	50.00V	50.20V
Short Circuit Current	13.87A	13.93A	13.99A	14.05A	14.11A
Maximum Power Voltage	41.20V	41.40V	41.60V	41.80V	42.00V
Maximum Power Current	13.11A	13.17A	13.23A	13.29A	13.33A
Module Efficiency	20.90%	21.09%	21.28%	21.48%	21.67%

* Under Standard Test Conditions (STC) of irradiance of 1000 W/m², spectrum AM 1.5 and cell temperature of 25°C.

ELECTRICAL PARAMETERS AT NMOT

Power	404W	408W	412W	416W	419W
Open Circuit Voltage	46.44V	46.62V	46.81V	47.00V	47.19V
Short Circuit Current	11.29A	11.35A	11.40A	11.46A	11.49A
Maximum Power Voltage	38.33V	38.49V	38.69V	38.88V	39.05V
Maximum Power Current	10.54A	10.60A	10.65A	10.70A	10.73A
Module Efficiency	15.63%	15.79%	15.94%	16.10%	16.21%

* Under Nominal Module Operating Temperature (NMOT), irradiance of 800 W/m², spectrum AM 1.5, ambient temperature 20°C, wind speed 1 m/s.

TEMPERATURE CHARACTERISTICS

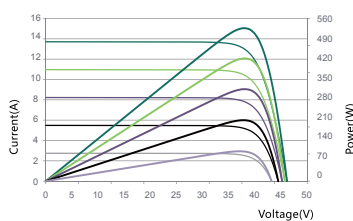
NMOT	41±3°C	Temp Coefficient of ISC	+0.05%/°C
Temp Coefficient of VOC	-0.28%/°C	Temp Coefficient of Pmax	-0.36%/°C

PACKING CONFIGURATION

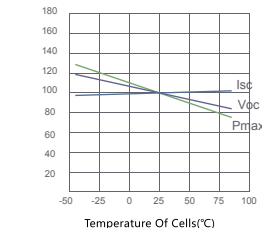
Modules/Pallet	36 Pieces	Modules/40' Container	720 Pieces
Packing Description	20 Pallets, Total=(36+36)x10=720 Pieces		

CHARACTERISTICS

LP182*182-M-72-MH-550W



LP182*182-M-72-MH-550W



MAXIMUM RATING

Output Tolerance	0~+5W
Operating Temperature	-40°C~+85°C
Wind Load/Snow Load	2400pa/5400pa
Fuse Current	25A



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MEPV 108 HALF-CUT ICON

BLACK - STANDARD - BICOLOUR »
400/410/415/ 420 Wp

QUALITY »



M10 Wafer
Ultra-high power



Efficiency
415Wp - 420Wp



Long durability
80% at the 30th year



Fire resistance
Maximum protection



Avoid losses
Better shading tolerance



Load endurance
Front load / Back load

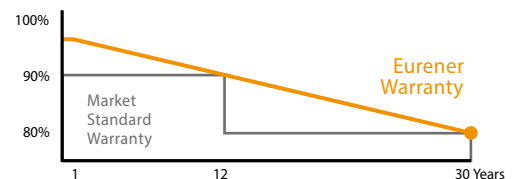


*** EUROPEAN QUALITY

WARRANTIES »

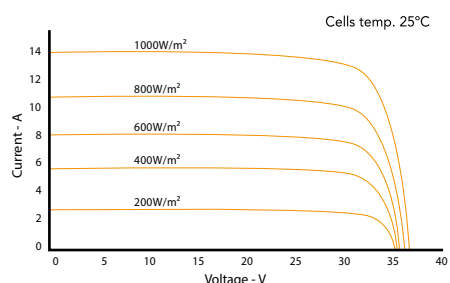
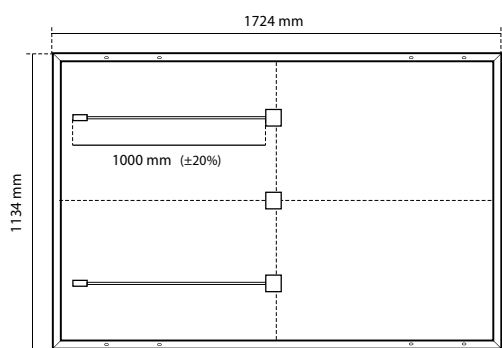
20 YEARS PRODUCT WARRANTY
+5 years for Premium Partners

30 YEARS PERFORMANCE WARRANTY
Linear Warranty



CERTIFICATES »





FRAME

Black / Silver anodized aluminium

Robust and resistant to corrosion

JUNCTION BOX

Sealed, robust and wide for heat dissipation

IP67/IP68 according to IEC 60529

Diodes by-pass built-in 3

Connector MC4 compatible

Cables 1000 mm (±20%) length and 4 mm² section

FRONTAL

3,2 mm thick tempered glass with high strength and ARC

Textured, extra-clear with low iron content

Frontal load (snow) 5400 Pa | Back load (wind) 2400 Pa

SOLAR CELLS

108 [2x (9x6)] cells monocrystalline silicon

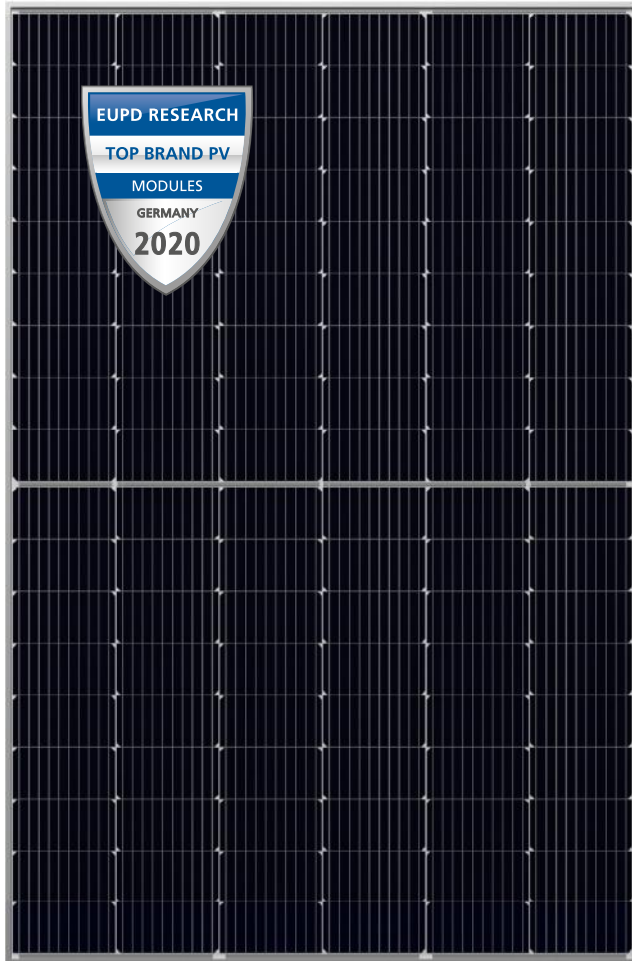
WEIGHT AND DIMENSIONS

21,5 Kg | 1724 x 1134 x 30 mm (±1%) | Pack: 962/936 pcs-truck

ELECTRIC DATA »

BLACK - STANDARD - BICOLOUR	MEPV 400	MEPV 410	MEPV 415	MEPV 420 STANDARD ONLY
STC: 1000 W/m ² , module temperature 25°C, AM 1,5				
Nominal power. Pmax	400 Wp	410 Wp	415 Wp	420 Wp
Max. power tolerance. Pmax	0 / +5 W	0 / +5 W	0 / +5 W	0 / +5 W
Area of the module	1,96 m ²			
Module efficiency	20,46 %	20,98 %	21,23 %	21,49 %
Isc	13,79 A	13,95 A	14,02 A	14,10 A
Voc	37,07 V	37,32 V	37,45 V	37,57 V
Imp	12,90 A	13,04 A	13,13 A	13,21 A
Vmp	31,01 V	31,45 V	31,61 V	31,81 V
NOCT: 800 W/m ² , ambient temperature 20°C, AM 1,5				
Nominal power. Pmax	301,72 W	309,48 W	313,23 W	317,20 W
Isc	11,13 A	11,26 A	11,31 A	11,38 A
Voc	35,02 V	35,26 V	35,38 V	35,50 V
Imp	10,42 A	10,53 A	10,60 A	10,67 A
Vmp	28,96 V	29,39 V	29,54 V	29,74 V
Operating parameters. Temperature coefficients				
Maximum voltage	1000 - 1500 V			
Maximum series fuse rating. Ir	25 A			
α Isc	0,044 % / °C			
β Voc	- 0,276 % / °C			
γ Pmax	- 0,35 % / °C			
Temperature range	- 40°C ~ + 85 °C			
NOCT	45 ± 2 °C			

NOTE: Read the instruction manual of this product and follow the indications STC. Values are valid for: 1000W/m², AM 1,5 and cells temperature of 25°C. Measurement tolerance +/-3% (AAA Solar simulation -IEC 60.904-9-). All the information of this brochure may be amended without notice by Eurener.
Eurener_MEPV 108_HALF-CUT ICON_400-420Wp_EN_AUG2023



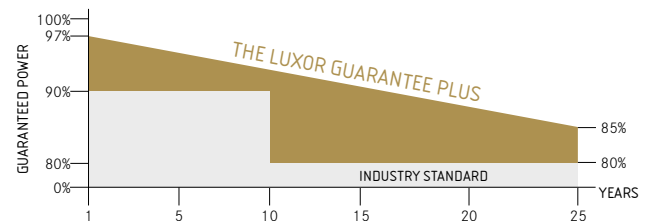
- + **SMANJENI GUBICI USLED DELIMIČNE OSEŃENOSTI**
- + **VIŠI PRINOSI: VEĆA REFLEKSIJA NA POVRŠINI ĆELIJE**
- + **PRIMENA: INDUSTRIJSKE, KOMERCIJALNE I STAMBENE ELEKTRANE**
- + **EKO: VEOMA EKONOMIĆNO I POUZDANO**



garancija



garancija na performanse



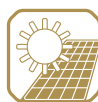
ECO LINE HALF CELL

M108 / 400 - 420 W

MONOKRISTALNI PANEL



Dokazane dugoročnosti



Dokazane snage



Obezbeđena sigurnost



Selekcija komponenti



Test stepena unakrsnog povezivanja



Dodatne performanse od 0 Wp do 6.49 Wp



Ćelije 100% bez PID efekta



Pakovano kako bi se izbegle mikropukotine na ćelijama



Nemačka garancija

ECO LINE HALF CELL M108 / 400 - 420 W

Monokristalni panel

Tip panela LX - XXXM/182-108+ | XXX = Nominalna snaga Pmpp

Električni podaci STC

Nominalna snaga Pmpp (Wp)	400.00	405.00	410.00	415.00	420.00
Opseg snage do	406.49	411.49	416.49	421.49	426.49
Nominalna struja Imp (A)	12.85	12.92	12.99	13.06	13.13
Nominalni napon Vmpp (V)	31.14	31.36	31.58	31.80	32.02
Struja kratkog spoja Isc (A)	13.57	13.64	13.72	13.79	13.86
Napon otvorenog kola Uoc (V)	37.08	37.34	37.60	37.86	38.12
Efikasnost po STC	20.79%	21.05%	21.30%	21.56%	21.82%
Efikasnost pri 200W/m ²	20.22%	20.47%	20.72%	20.98%	21.24%

Električni podaci NOCT

Snaga Pmpp (Wp)	296.96	300.67	304.38	308.10	311.81
Nominalna struja Imp (A)	10.38	10.44	10.49	10.55	10.61
Nazivni napon Vmpp (V)	28.61	28.81	29.01	29.20	29.40
Struja kratkog spoja Isc (A)	10.96	11.02	11.08	11.14	11.20
Napon otvorenog kola Uoc (V)	34.22	34.47	34.72	34.98	35.23

Specifikacija po STC (Standardni uslovi testiranja): ozračenost 1000W/m² | temperatura modula 25°C | Vazдушna masa = 1,5 NOCT (nominalna radna temperatura ćelije): zračenje 800W/m² | brzina vetra 1m/sec | temperatura okoline 20°C | radna temperatura ćelije 45 +/-2°C | Vazдушna masa = 1.5

Ograničavajuće vrednosti

Max. napon sistema (V)	1000 V ili 1500 V
Max. povratna struja (I)	25 A
Radna temperatura	-40 ili 85°C
Klasa zaštite	II
Max. opterećenje teretom (Pa) ²	5400
Max. zatezno opterećenje (Pa) ²	2400

Koeficijent temperature

Koeficijent temperature (V) (I) (P)	-0.285 %/°C 0.049 %/°C -0.360 %/°C
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Specifikacija

Broj ćelija	108 (6 x 18) 182 x 91 mm
Dimenzije modula (DxŠxD) ³ Težina	1724 mm x 1134 mm x 35 mm 22 kg
Prednje staklo	3.2 mm visoko transparentno kaljeno staklo, anti-refleksno solarno staklo
Okvir	čvrst, eloksiran aluminijumski
Priključna kutija	Bar IP67
Kabl	simetrične dužine kabla > 1.1 m i 1.1 m, 4 mm ² solarni kabl
Diode	3 Schottky diode
Konektor	MC4 ili ekvivalent (IP67)
Test izdržljivosti od grada	Ø 45 mm brzina udara 23 m/s ± 83 km/h

Specifikacije i prosečne vrednosti mogu neznatno da variraju. Relevantni su odgovarajući podaci pojedinačnog merenja. Specifikacije su podložne promenama bez prethodne najave. Tolerancija merenja u zavisnosti od opreme: nazivna snaga +/- 3%, ostale vrednosti +/- 10%. Sve informacije date u ovom tehničkom listu odgovaraju DIN EN 50380. Potencijalno smanjenje snage nakon puštanja u rad odve se ne razmatra. Dodatne informacije u uputstvima za instalaciju.

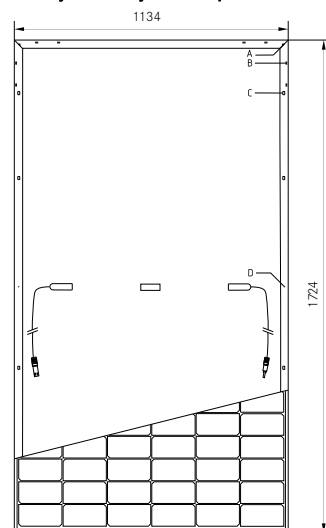
1 Specifični uslovi garancije su dati na www.luxor-solar.com/downloads.html

2 Horizontalno montiranje

3 Tolerancija D/Š = +/- 3 mm. D +/- 2mm

4 Lokacija i dimenzije rupa na zahtev

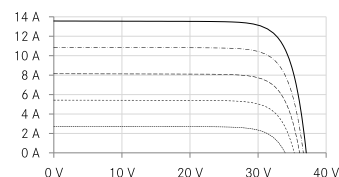
Zadnji - / Prednji - / Bočni prikaz³



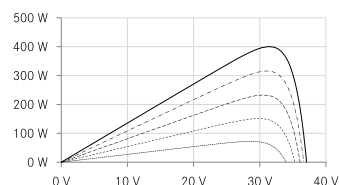
Rupe na okviru⁴
 A: 4 x drenaža
 B: 16 x ventilacija
 C: 8 x montiranje
 D: 2 x uzemljenje

Električne karakteristike

UI-diagram e.g. LX-400M/182-108+



UP-diagram e.g. LX-400M/182-108+



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



Zastupnik za Srbiju:

Telefon inženjering doo

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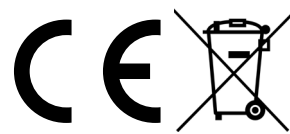
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IEC
 IEC 61215
 IEC 61730



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/downloads.html