



**LEAPTON**  
SOLAR

Monofacial

Bifacial

# LP182\*182-M-54-NH N-Type

Rated Power 410-430W



**N-Type MBB Cell**  
New circuit design N-type cells, can increase the output power of 10W~20W



**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 430W.



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



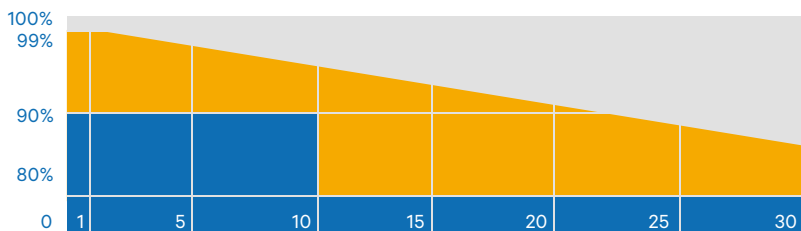
**Harsh Environmental Adaptability**  
Strict salt spray and ammonia corrosion test by TUV Nord.



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

Leapton N-Type Linear Power Warranty Industry Warranty

0.4% Annual Degradation over 30 years



\*J-PEC Product



IEC 61215-2: 2016  
IEC 61730-2: 2016

Headquarter : Leapton Energy Co., Ltd.

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Manufacturer : Leapton Solar (Changshu) Co., Ltd.

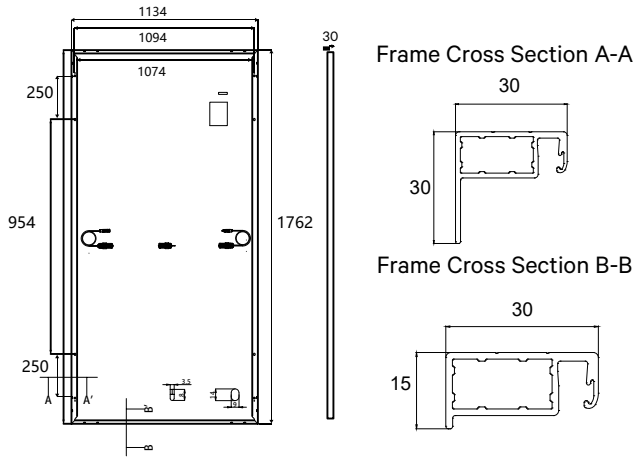
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## MECHANICAL DIAGRAMS



## SPECIFICATIONS

|                        |   |
|------------------------|---|
| Weight                 | 22kg  |
| Dimensions             | 1762mm*1134mm*30mm  |
| Cell Dimensions        | 182*182mm   |
| Cell Amount            | 54*2 pcs  |
| Maximum System Voltage | 1500V   |
| Junction Box           | IP68  |
| Frame                  | Aluminum Alloy  |
| Cable                  | 4mm <sup>2</sup> , N 1100mm/P 1100mm or customized length |
| Connector              | MC4 compatible  |
| Application Level      | Class A   |

## ELECTRICAL PARAMETERS AT STC

|                       |        |        |        |        |        |
|-----------------------|--------|--------|--------|--------|--------|
| Power                 | 410W   | 415W   | 420W   | 425W   | 430W   |
| Open Circuit Voltage  | 38.19V | 38.38V | 38.58V | 38.78V | 38.97V |
| Short Circuit Current | 13.50A | 13.58A | 13.66A | 13.73A | 13.81A |
| Maximum Power Voltage | 31.64V | 31.80V | 32.01V | 32.20V | 32.40V |
| Maximum Power Current | 12.96A | 13.05A | 13.12A | 13.20A | 13.27A |
| Module Efficiency     | 20.52% | 20.77% | 21.02% | 21.27% | 21.52% |

\* Under Standard Test Conditions (STC) of irradiance of 1000 W/m<sup>2</sup>, spectrum AM 1.5 and cell temperature of 25°C.

## ELECTRICAL PARAMETERS AT NMOT

|                       |        |        |        |        |        |
|-----------------------|--------|--------|--------|--------|--------|
| Power                 | 309W   | 312W   | 316W   | 320W   | 324W   |
| Open Circuit Voltage  | 36.28V | 36.47V | 36.65V | 36.83V | 37.02V |
| Short Circuit Current | 10.84V | 10.89A | 10.96A | 11.02A | 11.09A |
| Maximum Power Voltage | 29.51V | 29.66V | 29.81V | 29.96V | 30.08V |
| Maximum Power Current | 10.47A | 10.52A | 10.60A | 10.68A | 10.77A |
| Module Efficiency     | 15.46% | 15.61% | 15.81% | 16.01% | 16.20% |

\* Under Nominal Module Operating Temperature (NMOT), irradiance of 800 W/m<sup>2</sup>, spectrum AM 1.5, ambient temperature 20°C, wind speed 1 m/s.

## TEMPERATURE CHARACTERISTICS

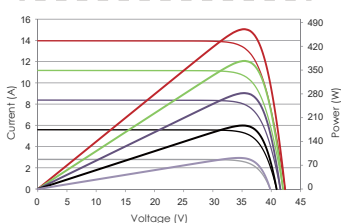
|                         |           |                          |            |
|-------------------------|-----------|--------------------------|------------|
| NMOT                    | 41±3°C    | Temp Coefficient of ISC  | +0.046%/°C |
| Temp Coefficient of VOC | -0.25%/°C | Temp Coefficient of Pmax | -0.30%/°C  |

## PACKING CONFIGURATION

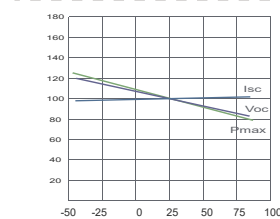
|                     |   |                      |            |
|---------------------|---|----------------------|------------|
| Modules/Pallet      | 36 Pieces                               | Modules/40'Container | 936 Pieces |
| Packing Description | 26 Pallets, Total=(36+36)x13=936 Pieces |     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

## CHARACTERISTICS

LP182\*182-M-54-NH-430W



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## MAXIMUM RATING

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

**15** YEARS Quality Warranty

**30** YEARS Power Warranty

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