



**LEAPTON**  
SOLAR

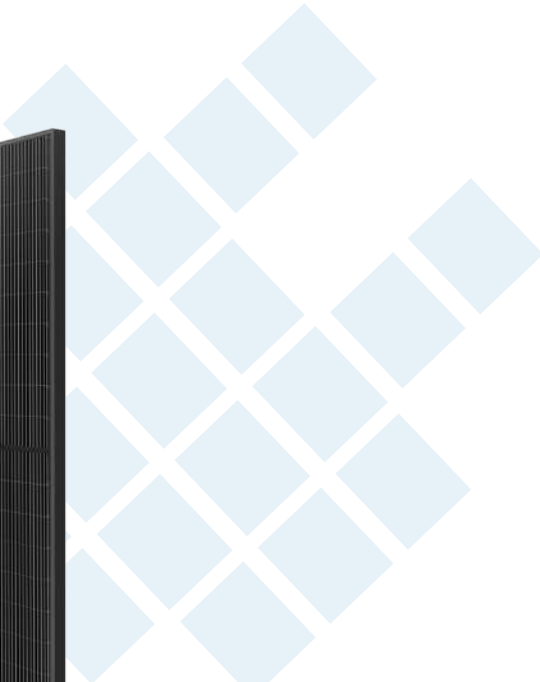
Monofacial

**Bifacial**

# LP182\*182-M-60-NB

Rated Power 490-520W

N-Type Double Glass



**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.



**Bifacial with double-glass**  
Module adopts 182\*188mm half cells, bifacial module provide an additional 5%~25% output.



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



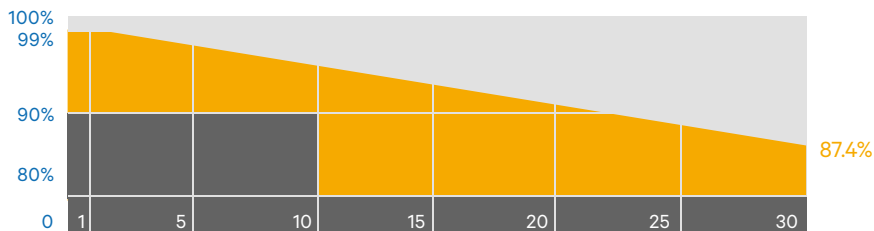
**Harsh Environmental Adaptability**  
Strict salt spray and ammonia corrosion test by TUV Nord.



**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



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

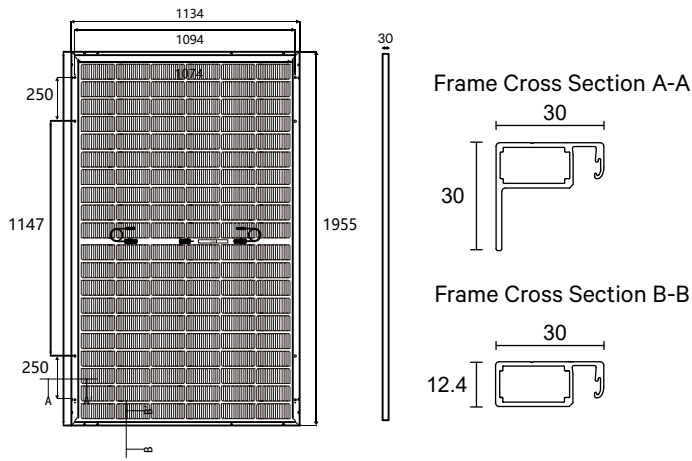
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## MECHANICAL DIAGRAMS



## SPECIFICATIONS

Weight	26.6kg
Dimensions	1955mm*1134mm*30mm
Cell Dimensions	182*188mm
Cell Amount	60*2 pcs
Maximum System Voltage	1500V
Junction Box	IP68
Front glass	2.0mm, Anti-Reflection Coating
Back glass	2.0mm, Heat Strengthened Glass
Frame	Aluminum Alloy
Cable	4mm <sup>2</sup> , N 1200mm/P 1200mm for Horizontal installation 4mm <sup>2</sup> , N 300mm/P 300mm for Vertical installation
Connector	MC4 compatible
Bifaciality	80±5%

## ELECTRICAL PARAMETERS AT STC

Power	490W	495W	500W	505W	510W	515W	520W
Open Circuit Voltage	43.67V	43.82V	43.97V	44.12V	44.27V	44.42V	44.57V
Short Circuit Current	14.00A	14.09A	14.18A	14.26A	14.35A	14.44A	14.52A
Maximum Power Voltage	36.19V	36.35V	36.50V	36.65V	36.80V	36.95V	37.12V
Maximum Power Current	13.54A	13.62A	13.70A	13.78A	13.86A	13.94A	14.01A
Module Efficiency	22.10%	22.33%	22.55%	22.78%	23.00%	23.23%	23.46%

\* 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	369W	373W	376W	380W	383W	387W	391W
Open Circuit Voltage	41.53V	41.68V	41.83V	41.98V	42.12V	42.27V	42.44V
Short Circuit Current	11.26A	11.32A	11.36A	11.43A	11.48A	11.55A	11.61A
Maximum Power Voltage	33.76V	33.91V	34.06V	34.21V	34.35V	34.52V	34.70V
Maximum Power Current	10.93A	11.00A	11.04A	11.11A	11.15A	11.21A	11.27A

\* 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.

## ELECTRICAL PARAMETERS ( AT 10% BIFACIAL POWER OUTPUT )

Output Power	539W	545W	550W	556W	561W	567W	572W
Open Circuit Voltage	43.67V	43.82V	43.97V	44.12V	44.27V	44.43V	44.59V
Short Circuit Current	15.50A	15.61A	15.69A	15.80A	15.88A	15.98A	16.03A
Maximum Power Voltage	36.20V	36.34V	36.50V	36.65V	36.80V	36.96V	37.12V
Maximum Power Current	14.89A	15.00A	15.07A	15.17A	15.24A	15.34A	15.41A

## TEMPERATURE CHARACTERISTICS

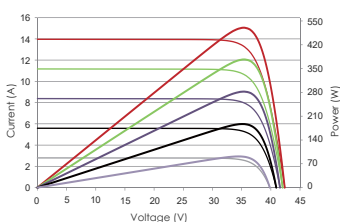
NMOT	41±3°C	Temp Coefficient of ISC	+0.046%/°C
Temp Coefficient of VOC	-0.25%/°C	Temp Coefficient of Pmax	-0.30%/°C

## PACKING CONFIGURATION

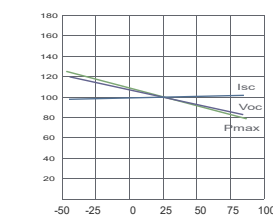
Modules/Pallet	37 Pieces	Modules/40'Container	888 Pieces
Packing Description	24 Pallets, Total=(37+37)x12=888 Pieces		

## CHARACTERISTICS

LP182\*182-M-60-NB-510W



LP182\*182-M-60-NB-510W



## 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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