2026 V2

LEAPTON SOLAR

Monofacial | Bifacial

LP182*182-M-54-NB

N-Type TOPCon Dual Glass

Rated Power 440-470W

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

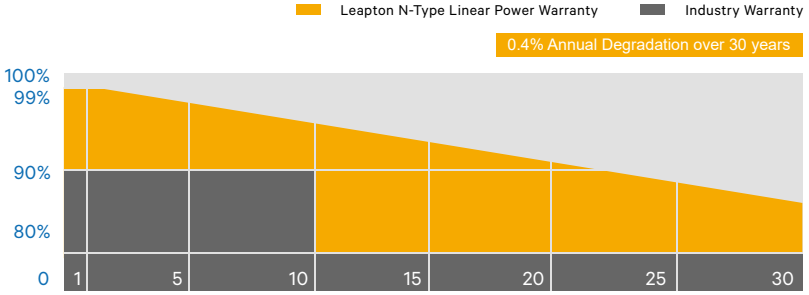
Low Light Features
Higher performance under low light environment.

Bifacial with dual 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.



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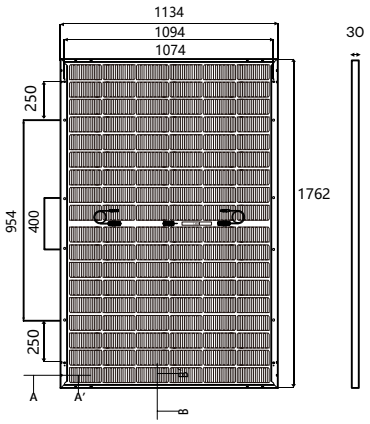
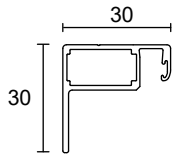
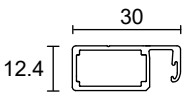
MECHANICAL DIAGRAMS



Frame Cross Section A-A



Frame Cross Section B-B



SPECIFICATIONS

Weight	24kg
Dimensions	1762mm*1134mm*30mm
Cell Dimensions	182*188mm
Cell Amount	54*2 pcs
Maximum System Voltage	1500V
Junction Box	IP68
Front glass	2.0mm, Anti-Reflection Coating
Back galss	2.0mm, Heat Strengthened Glass
Frame	Aluminum Alloy
Cable	4mm², N 1100mm/P 1100mm for Horizontal installation 4mm², N 300mm/P 300mm for Vertical installation
Connector	MC4 compatible
Bifaciality	80±5%

ELECTRICAL PARAMETERS AT STC

Power	440W	445W	450W	455W	460W	465W	470W
Open Circuit Voltage	39.38V	39.53V	39.68V	39.83V	39.98V	40.13V	40.30V
Short Circuit Current	13.98A	14.07A	14.15A	14.23A	14.33A	14.43A	14.51A
Maximun Power Voltage	32.57V	32.72V	32.87V	33.02V	33.18V	33.34V	33.52V
Maximum Power Current	13.51A	13.60A	13.69A	13.78A	13.86A	13.95A	14.02A
Module Efficiency	22.02%	22.27%	22.52%	22.77%	23.02%	23.27%	23.52%

* 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	331W	335W	339W	343W	346W	350W	353W
Open Circuit Voltage	37.38V	37.53V	37.68V	37.83V	37.99V	38.15V	38.32V
Short Circuit Current	11.24A	11.31A	11.37A	11.45A	11.49A	11.56A	11.61A
Maximun Power Voltage	30.37V	30.54V	30.68V	30.82V	30.98V	31.15V	31.33V
Maximum Power Current	10.90A	10.97A	11.05A	11.13A	11.17A	11.24A	11.27A

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

ELECTRICAL PARAMETERS (AT 10% BIFACIAL POWER OUTPUT)

Output Power	484W	490W	495W	501W	506W	512W	517W
Open Circuit Voltage	39.38V	39.53V	39.68V	39.83V	39.99V	40.14V	40.31V
Short Circuit Current	15.47A	15.58A	15.66A	15.77A	15.86A	15.98A	16.03A
Maximun Power Voltage	32.57V	32.71V	32.87V	33.01V	33.18V	33.35V	33.52V
Maximum Power Current	14.86A	14.98A	15.06A	15.18A	15.25A	15.35A	15.42A

TEMPERATURE CHARACTERISTICS

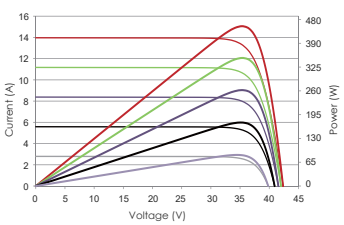
NMOT	41±3°C	Temp Coefficient of ISC	+0.046%/°C
Temp Coefficient of VOC	-0.25%/°C	Temp Coefficient of Pmax	-0.30%/°C

PACKING CONFIGURATION

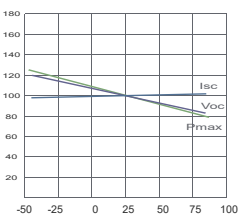
Modules/Pallet	37 Pieces	Modules/40'Container	962 Pieces
Packing Description	26 Pallets, Total=(37+37)x13=962 Pieces		

CHARACTERISTICS

LP182*182-M-54-NB-460W



LP182*182-M-54-NB-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

30 YEARS Power Warranty

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