2026 V2

LEAPTON SOLAR

Monofacial | Bifacial

LP182*199-M-72-NH N-Type TOPCon

Rated Power 630-650W



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

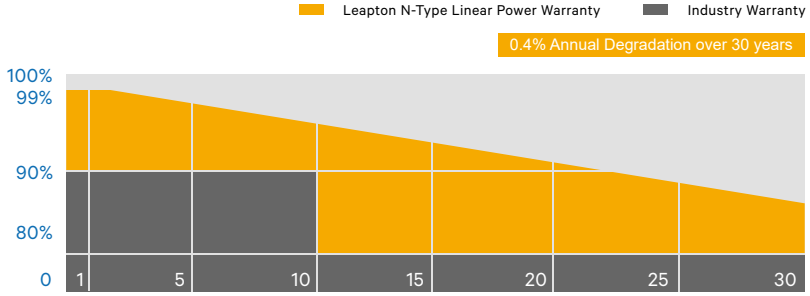
Low Light Features
Higher performance under low light environment.

Higher Output Power
Module adopts 144 pcs of 182*182mm half cells, the maximum power can reach 650W.

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

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

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



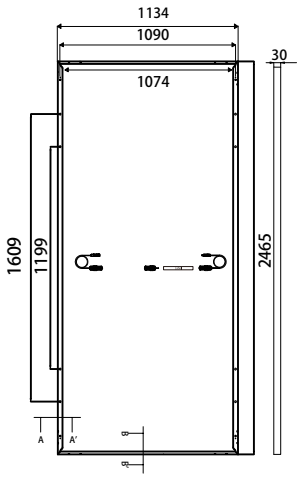
Headquarter : Leapton Energy Co., Ltd.
Tosei Bldg. 6F, 1-2-1 Aioi-cho, Chuo-ku Kobe-shi, Hyogo, 650-0025, Japan
+81-78-382-3182
www.leaptonenergy.jp

Manufacturer : Leapton Solar (Changshu) Co., Ltd.
No.9, Sunshine Avenue, Changshu City, Jiangsu, China
+86-512-88800068
info@leaptonenergy.com
www.leaptonpv.com

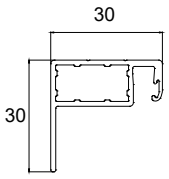
Leapton Energy Co., Ltd.

2026 V2

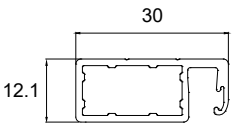
MECHANICAL DIAGRAMS



Frame Cross Section A-A



Frame Cross Section B-B



SPECIFICATIONS

Weight	28.7kg
Dimensions	2465mm*1134mm*30mm
Cell Dimensions	182*199mm
Cell Amount	72*2 pcs
Maximum System Voltage	1500V
Junction Box	IP68
Frame	Aluminum Alloy
Front galss	3.2mm, Anti-Reflection Coating, High Transmission, Low Iron, Tempered Glass
Cable	$4mm^2$, N 1400mm/P 1400mm for Horizontal installation $4mm^2$, N 300mm/P 300mm for Vertical installation
Connector	MC4 compatible

ELECTRICAL PARAMETERS AT STC

Power	630W	635W	640W	645W	650W
Open Circuit Voltage	52.49V	52.69V	52.89V	53.09V	53.29V
Short Circuit Current	15.21A	15.23A	15.25A	15.30A	15.35A
Maximun Power Voltage	43.88V	44.07V	44.29V	44.48V	44.68V
Maximum Power Current	14.36A	14.41A	14.45A	14.50A	14.55A
Module Efficiency	22.54%	22.72%	22.90%	23.07%	23.25%

* 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	474W	478W	482W	486W	489W
Open Circuit Voltage	49.89V	50.09V	50.29V	50.49V	50.69V
Short Circuit Current	12.21A	12.23A	12.27A	12.32A	12.33A
Maximun Power Voltage	40.95V	41.14V	41.34V	41.54V	41.76V
Maximum Power Current	11.58A	11.62A	11.66A	11.70A	11.71A

* 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

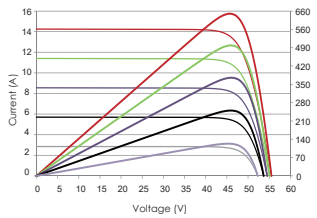
NMOT	41±3°C	Temp Coefficient of ISC	+0.046%/°C
Temp Coefficient of VOC	-0.25%/°C	Temp Coefficient of Pmax	-0.30%/°C

PACKING CONFIGURATION

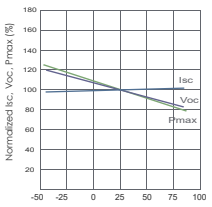
Modules/Pallet	37 Pieces	Modules/40'Container	664 Pieces
Packing Description	18 Pallets, Total=37*16+36*2=664 Pieces		

CHARACTERISTICS

LP182*199-M-72-NH-640W



LP182*199-M-72-NH-640W



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

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
+86-512-88800068
info@leaptonenergy.com
www.leaptonpv.com

Leapton Energy Co., Ltd.