

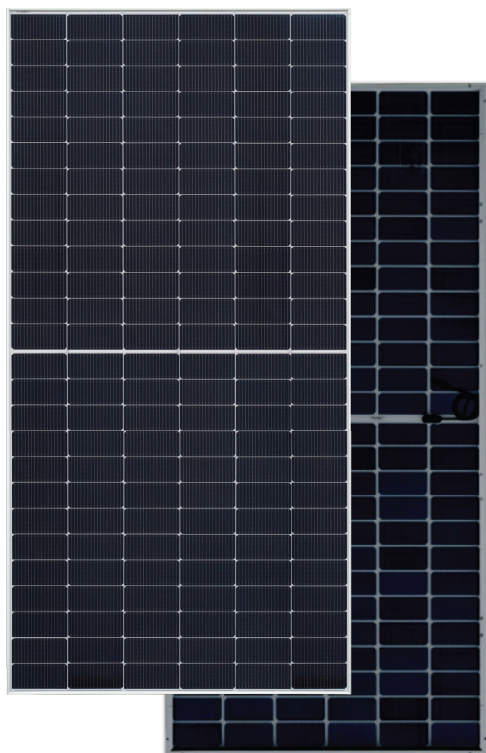
LIBRA

LN72-18x(ND) -Double Glass

High Efficiency Lower LID and TOPCon cell with Half-cut Technology
Big Size :Cell 182 x91.875mm Monocrystalline

635W / 640W

645W / 650W / 655W



10-30% Additional Power Generation

10-30% additional power generation comparing with conventional P-type module



Lower LID (Light Induced Degradation)

N-type modules with Tunnel Oxide Passivating Contacts (TOPCon) technology offer lower LID/LeTID degradation and better low light performance



Lower LCOE

Higher power output and lower BOS cost



Better Weak Illumination Response

Higher power output even under low-light environment



Better Temperature Coefficient

Higher power generation under normal working conditions



Enhanced Mechanical Load

Certified to withstand: wind load (2400 Pascal) and snow load (5400 Pascal)

- Module Efficiency
23.5%
- No. of Cells
156(6 × 26)
- Weight
34.1±0.5kg
- Dimensions
2465 × 1134 × 30mm

Comprehensive and First-rate Certification System

IEC61215: 2021. IEC61730: 2023. UL61730: 2017. IEC62804: 2015
ISO9001 ISO14001 and ISO45001



LIBRA SERIES N6

Better Choice For Higher Efficiency



Electrical Characteristics

Module	LN78-18X(ND)-F				
Maximum Power at STC (Pmax)	635W	640W	645W	650W	655W
Open - Circuit Voltage (Voc)	55.98V	56.12V	56.26V	56.40V	56.54V
Short - Circuit Current (Isc)	14.43A	14.51A	14.59A	14.67A	14.75A
Optimum Operating Voltage (Vmp)	46.41V	46.57V	46.71V	46.86V	47.00V
Optimum Operating Current (Imp)	13.68A	13.75A	13.82A	13.89A	13.95A
Module efficiency	22.7%	22.9%	23.1%	23.3%	23.5%
Power Tolerance	0 ~ + 3%				
Maximum System Voltage	1500V DC (UL / IEC)				
Maximum Series Fuse Rating	25A				
Operating Temperature	-40 ℃ to +85 ℃				

* STC: Irradiance 1000W/m², module temperature 25, AM=1.5

Optional black frame or white frame module according to customer requirements

NMOT

Module	LN78-18X (ND)-F (Bifaciality 80±10%)				
Maximum Power	483W	488W	492W	494.5W	489.4W
Open - Circuit Voltage (Voc)	53.37V	53.40V	53.43V	53.46V	53.49V
Short - Circuit Current (Isc)	11.58A	11.64A	11.70A	11.76A	11.82A
Optimum Operating Voltage (Vmp)	44.10V	44.21V	44.32V	44.43V	44.54V
Optimum Operating Current (Imp)	10.95A	11.01A	11.07A	11.13A	11.19A
NMOT	45±2℃				

* NMOT: Irradiance 800W/m², ambient temperature 20℃, wind speed 1m/s

Mechanical Characteristics

Solar Cells	Monocrystalline 182 × 91.875mm
No. of Cells	156(6 × 26)
Dimensions	2465 × 1134 × 30mm
Weight	34.1±0.5kg
Front Glass	High transmission tempered glass; thickness: 2.0mm
Frame	Anodized aluminium alloy
Junction Box	IP68
Cable	4mm ² (UL / IEC); length: (+)400mm, (-)200mm / customized length
Connectors	MC4-EVO2/MC4 Compatible
Packaging Configuration	36pcs/box, 576pcs/40'HQ container

Temperature Characteristics

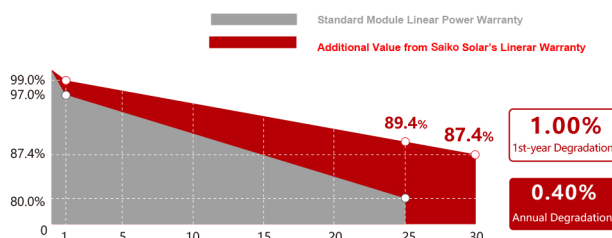
Temperature Coefficient of Pmax	-0.29%/℃
Temperature Coefficient of Voc	-0.23%/℃
Temperature Coefficient of Isc	+0.046%/℃

Warranty

20 - years
product warranty

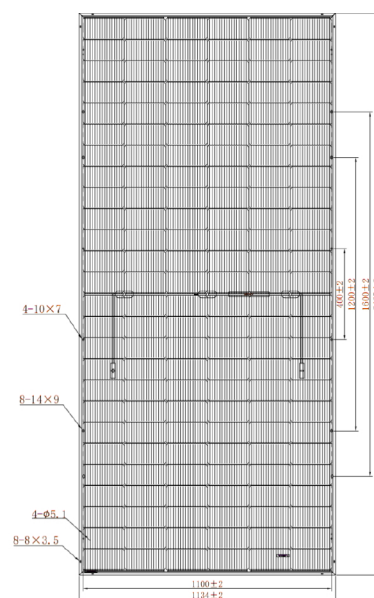
30 - years
warranty on power output

Specific information is referred to
the product quality guarantee



The module recycling should be carried out by the professional institutions at the end of module life cycle

Engineering Drawing



IV Curves

