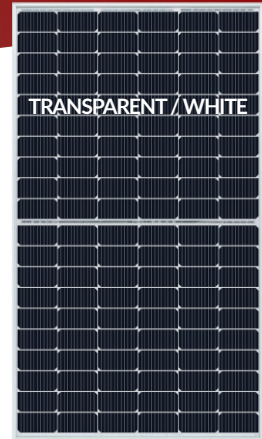


CNBPOWER® SERIES 5

435-455W Mono BIFACIAL DG

120 Half-Cell Layout

M10/182mm Cell



Bifacial Cell
Module Technologies



Gallium-doped Technology



Half Cut Cell Technology



Anti-PID
Low LID
Performance

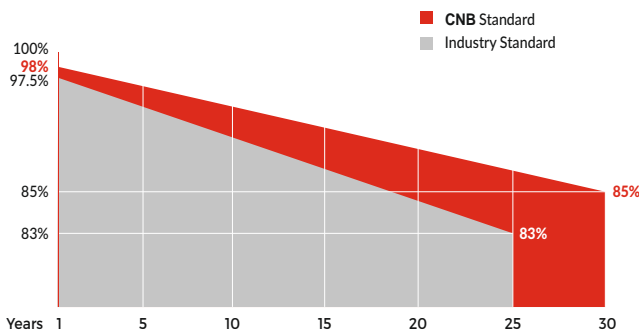


Less Hot Spot
Shading Effects



Enduring High
Reliability & Performance

Linear performance Warranty



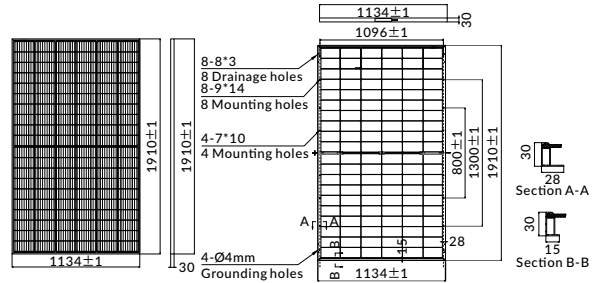
Comprehensive Certificates

- ISO9001:2015 QMS
- ISO14001:2015 EMS
- ISO45001:2018 OHSMS
- IEC61215/IEC61730 Standard quality



MECHANICAL CHARACTERISTICS

Solar Cells	Mono
No. of Cells	120 (6x20)
Dimensions	1910 x 1134 x 30mm
Weight	26.0kg
Front Glass	2.0mm coated semi-tempered glass
Back Glass	2.0mm semi-tempered glass
Junction Box	Ip68 rated (3 by pass diodes)
Output Cables	4.0mm ² 300mm (+) / 300mm (-) Length can be customized
Connectors	Mc4 compatible
Mechanical load test	5400Pa



ELECTRICAL PARAMETERS

POWER CLASS	LNVK-435MD	LNVK-440MD	LNVK-445MD	LNVK-450MD	LNVK-455MD
	STC	STC	STC	STC	STC
Maximum power (Pmax)	435W	440W	445W	450W	455W
Open Circuit Voltage (Voc)	48.50V	48.68V	48.85V	49.03V	49.20V
Short Circuit Current (Isc)	11.63A	11.70A	11.77A	11.84A	11.91A
Voltage at Maximum power (Vmpp)	40.81V	41.01V	41.20V	41.40V	41.59V
Current Maximum Power (Impp)	10.66A	10.73A	10.80A	10.87A	10.94A
MODULE EFFICIENCY (%)	20.08%	20.31%	20.55%	20.78%	21.01%

STC: Irradiance 1000W/m², cell temperature 25°C, AM1.5G

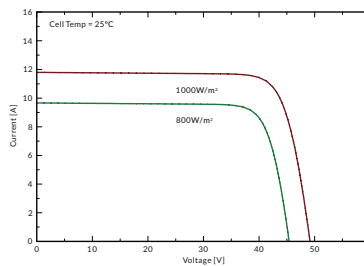
BIFACIAL OUTPUT-REARSIDE POWER GAIN

5%	Maximum power (Pmax)	457W	462W	467W	473W	478W
	Module Efficiency STC (%)	21.09%	21.33%	21.57%	21.82%	22.06%
15%	Maximum power (Pmax)	500W	506W	512W	518W	523W
	Module Efficiency STC (%)	23.10%	23.36%	23.63%	23.89%	24.16%
25%	Maximum Power (Pmax)	544W	550W	556W	563W	569W
	Module Efficiency STC (%)	25.10%	25.39%	25.68%	25.97%	26.26%

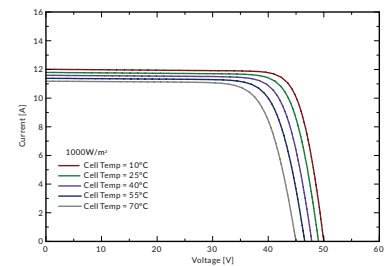
PACKING CONFIGURATION

Container	20'GP	40'HQ
Pieces per pallet	36	36
Pallets per container	6	24
Pieces per container	216	864

I-V CURVE



LNVK-450MD/I-V



OPERATING CHARACTERISTICS

Operating Module Temperature	-40°C to +85°C
Maximum System Voltage	1500 DC (IEC)
Maximum Series Fuse Rating	25A
Power Tolerance	0/+5W

TEMPERATURE CHARACTERISTICS

Nominal Operating Temperature (NMOT)	45±2°C
Temperature Coefficient of Pmax	-0.32%/°C
Temperature Coefficient of Voc	-0.26%/°C
Temperature Coefficient of Isc	+0.046%/°C

Note: The specifications, data and technical characteristics provided in this data sheet are subject to changes due to continuous R&D, product innovation and improvement. CNB SOLAR reserves the right to modify the information any time without prior notice.