

CNB POWER

Quality Maker

CNBPOWER® SERIES 5

440-460W Mono

120 Half-Cell Layout

M10/182mm Cell



Gallium-doped Technology



Half Cut Cell Technology



MBB Technology



Anti-PID
Low LID
Performance

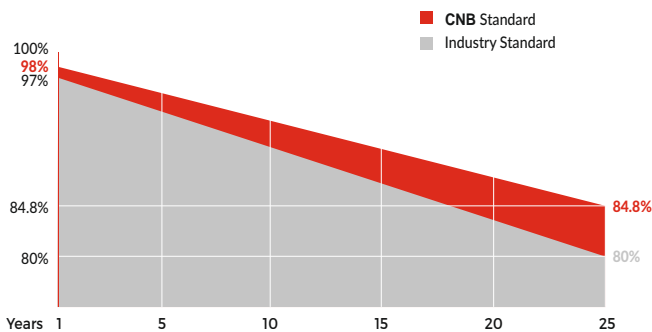


Less Hot Spot
Shading Effects



Lower BOS & LCOE

Linear performance Warranty



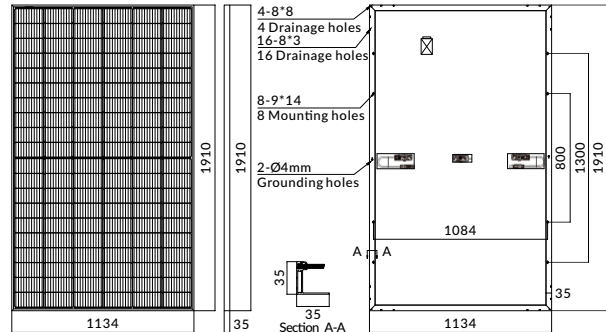
Comprehensive Certificates

- 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 35mm
Weight	23.0kg
Front Glass	3.2mm coated tempered glass
Frame	Anodized aluminium alloy
Junction Box	Ip68 rated (3 by pass diodes)
	4.0mm ²
Output Cables	300mm (+) / 300mm (-)
	Length can be customized
Connectors	Mc4 compatible
Mechanical load test	5400Pa



ELECTRICAL PARAMETERS

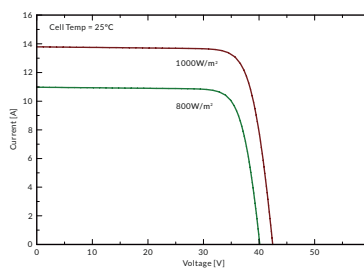
POWER CLASS	LNVK-440M		LNVK-445M		LNVK-450M		LNVK-455M		LNVK-460M	
	STC	NMOT	STC	NMOT	STC	NMOT	STC	NMOT	STC	NMOT
Maximum power (Pmax)	440W	331W	445W	335W	450W	339W	455W	343W	460W	347W
Open Circuit Voltage (Voc)	41.94V	39.56V	42.12V	39.83V	42.31V	40.09V	42.49V	40.35V	42.68V	40.62V
Short Circuit Current (Isc)	13.58A	10.87A	13.65A	10.91A	13.72A	10.95A	13.79A	10.99A	13.86A	11.03A
Voltage at Maximum power (Vmpp)	34.67V	32.29V	34.87V	32.56V	35.07V	32.82V	35.27V	33.08V	35.47V	33.33V
Current Maximum Power (Impp)	12.69A	10.25A	12.76A	10.29A	12.83A	10.33A	12.90A	10.37A	12.97A	10.41A
MODULE EFFICIENCY (%)	20.31%		20.55%		20.78%		21.01%		21.24%	

STC: Irradiance 1000W/m², cell temperature 25°C, AM1.5G NMOT: Irradiance 800W/m², ambient temperature 20°C, wind speed 1m/s, AM1.5G

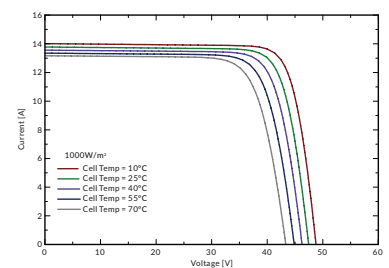
PACKING CONFIGURATION

Container	20'GP	40'HQ
Pieces per pallet	31	31
Pallets per container	6	24
Pieces per container	186	744

I-V CURVE



LNVK-455M/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	-0.36%/°C
Temperature Coefficient of Voc	-0.28%/°C
Temperature Coefficient of Isc	+0.05%/°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.