

CNB POWER

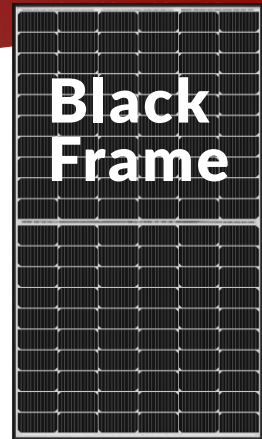
Quality Maker

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

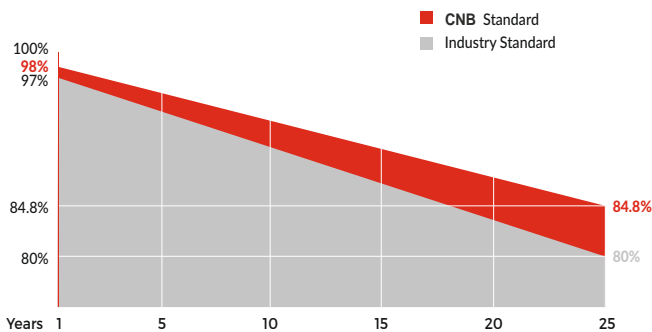


Less Hot Spot
Shading Effects



Lower BOS & LCOE

Linear performance Warranty



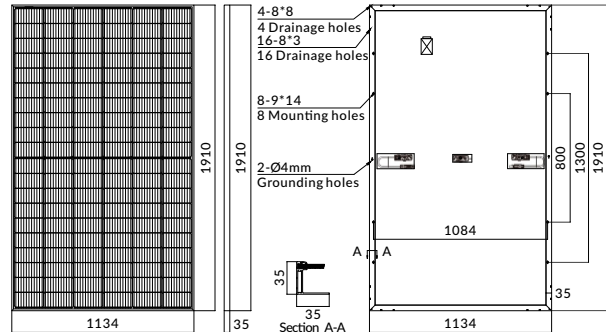
Comprehensive Certificates

- 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

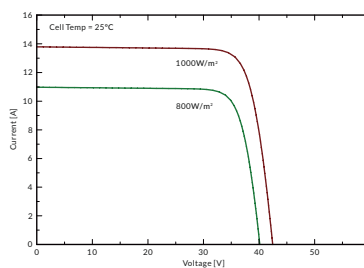
| POWER CLASS | LNVK-440M | | LNVK-445M | | LNVK-450M | | LNVK-455M | | LNVK-460M | |
|---------------------------------|-----------|--------|-----------|--------|-----------|--------|-----------|--------|-----------|--------|
| | STC | NMOT | STC | NMOT | STC | NMOT | STC | NMOT | STC | NMOT |
| Maximum 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

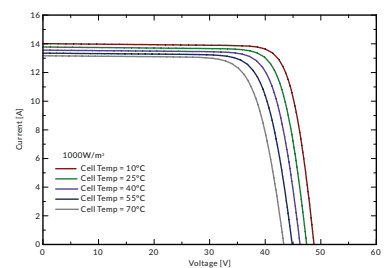
PACKING CONFIGURATION

| | | |
|-----------------------|-------|-------|
| 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.