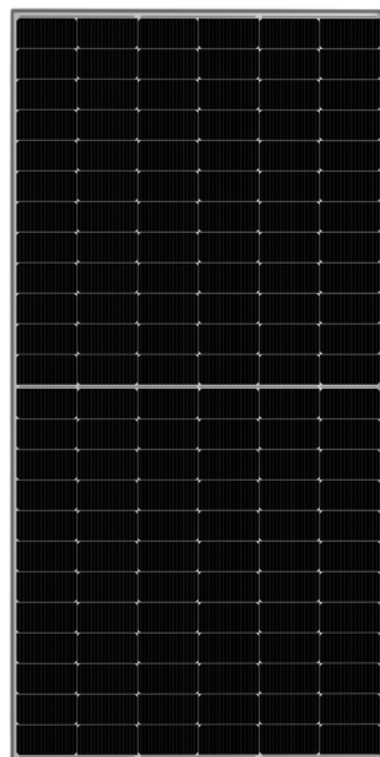


MOTECH

POWER UP NOW



HALF CUT 144 CELL

N TYPE MONOCRYSTALLINE MODULE

585-610W

POWER OUTPUT RANGE

23,42%

MAXIMUM EFFICIENCY

0~+5W

POSITIVE POWER TOLERANCE

16BB

SUPER MULTI BUSBAR TECHNOLOGY

N-TYPE MODULES WITH
TOPCON CELL TECHNOLOGY

SYSTEM CERTIFICATES

IEC61215/IEC61730/IEC61701
ISO 9001: Quality Management System
ISO 14001: Environmental Management
ISO45001: Occupational Health and Safety



MOTECH
POWER UP NOW

PRODUCTS

Lion 2.1 Series

POWER RANGE

585-610W



N-Type Technology

- Up to 610W front power and 23,42% module efficiency with half cut tech
- SMBB Technology Better light trapping and current collection to improve module power output and reliability.
- Lower resistance and good reflection effect of SMBB ensure high power



High reliability

- Ensured PID resistance through cell process and module material control
- Resistant to salt, acid and ammonia
- Proven to be reliable in high temperature and humidity areas
- Minimizes micro-crack and snail trails
- Mechanical performance: Up to 5400 Pa positive load and 2400 Pa negative



High energy generation

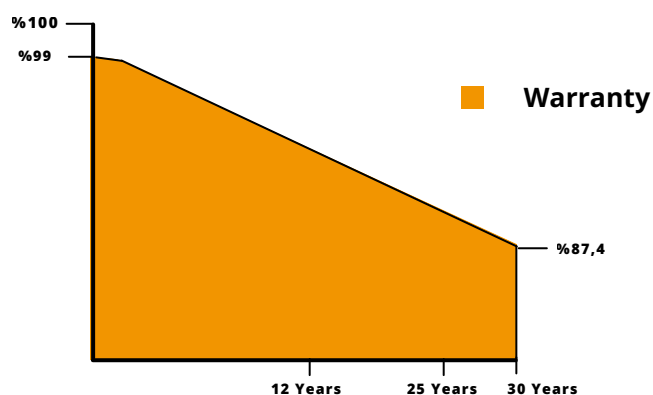
- Excellent current and low light performance validated by 3rd party
- Perfect cell process and module material optimization
- Lower temp coefficient (-0.29%) and NMOT bring more energy
- Better anti-shading performance and lower operating temperature



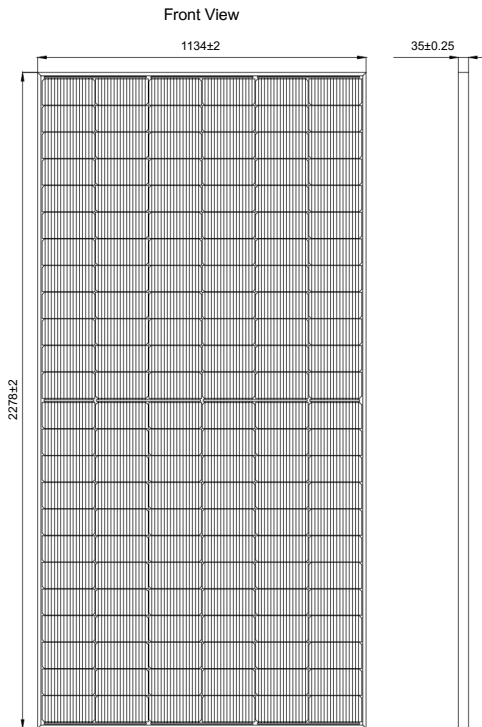
Easy to install

- Frame design makes module compatible with all racking and installation methods
- Easy to handle and install as normal framed module during transportation

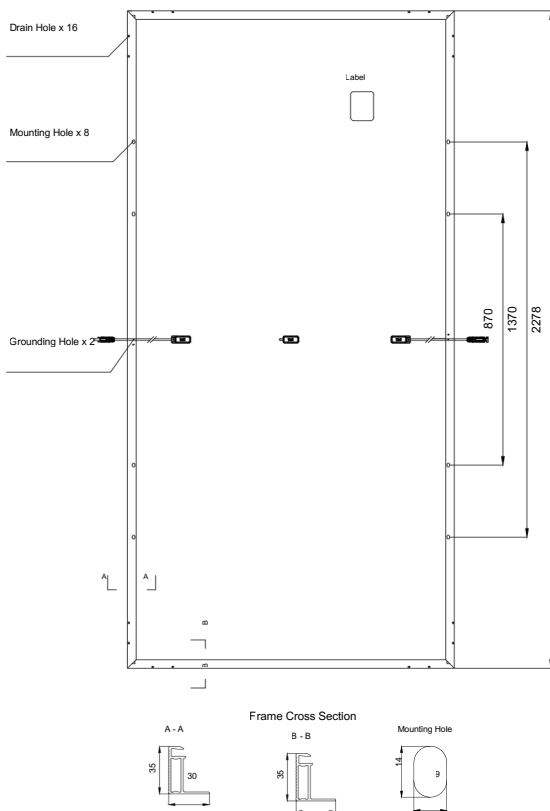
Industry-leading warranty



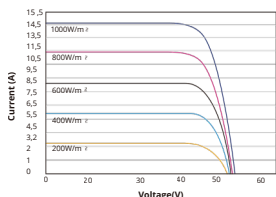
ENGINEERING DRAWING (mm)



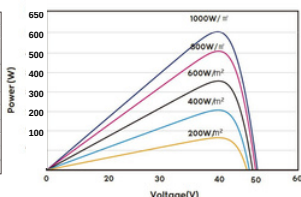
Rear View



I-V CURVES OF PV MODULE



P-V CURVES OF PV MODULE



ELECTRICAL DATA (STC)

Peak Power Watts-PMAX (Wp)*	585	590	595	600	605	610
Power Tolerance Range-PMAX (W)	0 ~ +5					
Maximum Power Voltage-VMPP (V)	43,80	43,96	44,11	44,29	44,39	44,39
Maximum Power Current-IMPP (A)	13,36	13,43	13,49	13,55	13,63	13,63
Open Circuit Voltage-VOC (V) Short	52,52	52,67	52,82	53,09	53,13	53,13
Circuit Current-ISC (A) Module	14,01	14,08	14,13	14,17	14,26	14,26
Efficiency ° m (%)	22,65	22,84	23,03	23,23	23,42	23,42

STC: Irradiance 1000W/m², Cell Temperature 25°C, AM=1.5
Measuring tolerance: ±3%

ELECTRICAL DATA (NMOT)

Maximum Power-PMAX (Wp)	435	439	443	446	450	454
Maximum Power Voltage-VMPP (V)	40,47	40,73	40,88	41,02	41,19	41,28
Maximum Power Current-IMPP (A)	10,75	10,77	10,82	10,88	10,93	10,99
Open Circuit Voltage-VOC (V) Short	49,24	49,37	49,51	49,65	49,90	49,94
Circuit Current-ISC (A)	11,47	11,54	11,61	11,67	11,71	11,80

NMOT: Irradiance at 800W/m², Ambient Temperature 20°C, Wind Speed 1m/s.

MECHANICAL DATA

Solar Cells	N Type Monocrystalline
Cell Orientation	144 cells (6×24)
Module Dimensions	2278×1134×35mm (±2mm)
Weight	28kg
Front Glass	3,2mm, High Transmission, AR Coated Heat Strengthened
Frame	35mm Anodized Aluminum Alloy
J-Box	IP 68 rated and 30cm or (optional 130cm cable)
Cables	Photovoltaic Technology Cable 4.0mm²
Connector	MC4 EVO2 / TS4 Compatible

TEMPERATURE RATINGS

NMOT(Nominal Module Operating Temperature)	45°C (±2°C)
Temperature Coefficient of PMAX	-0.29 °C%
Temperature Coefficient of VOC	-0.25 °C%
Temperature Coefficient of ISC	+0.048%/°C

MAXIMUM RATINGS

Operational Temperature	-40~+85°C
Maximum System Voltage	1500V DC (IEC)
Max Series Fuse Rating	30A

WARRANTY

12 year Product Workmanship Warranty
30 Year Power Warranty
2% First Year Degradation
0.40% Annual Power Attenuation

(Please refer to product warranty for details)

PACKAGING CONFIGURATION

Modules per box	33 pcs
Modules per 40' Container	660 pcs

