



MOTECH

POWER UP NOW

HALF CUT 120 CELL

MONOCRYSTALLINE MODULE

360-385W

POWER OUTPUT RANGE

21.1%

MAXIMUM EFFICIENCY

0~+5W

BINNING TOLERANCE

9BB

MULTI BUSBAR

PERC CELL TECHNOLOGY

PRODUCTS

Berlin Series

POWER RANGE

360-385W



High power Mono Perc

- **Up to 385W front power and 21.1% module efficiency with half cut tech**
- MBB (Multi Busbar) technology bringing more BOS savings
- **Lower resistance and good reflection effect of MBB 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
- **Certified to fire class A**
- Minimizes micro-crack and snail trails
- Mechanical performance: Up to 5400 Pa positive load and 2400 Pa negative



High energy generation

- Up to 25% additional power gain from back side depending on the design
- Excellent current and low light performance validated by 3rd party
- Perfect cell process and module material optimization
- **Lower temp coefficient (-0.35%) and NMOT bring more energy**
- Better anti-shading performance and lower operating temperature

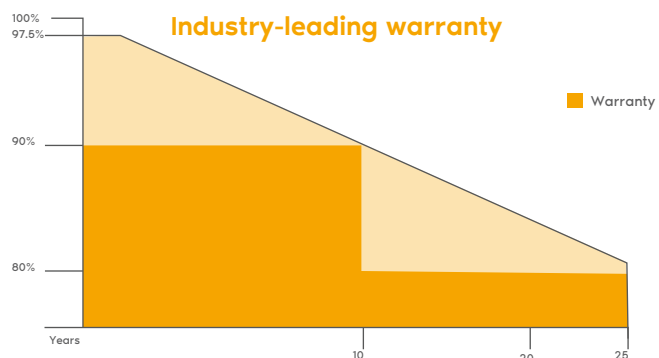


Easy to install

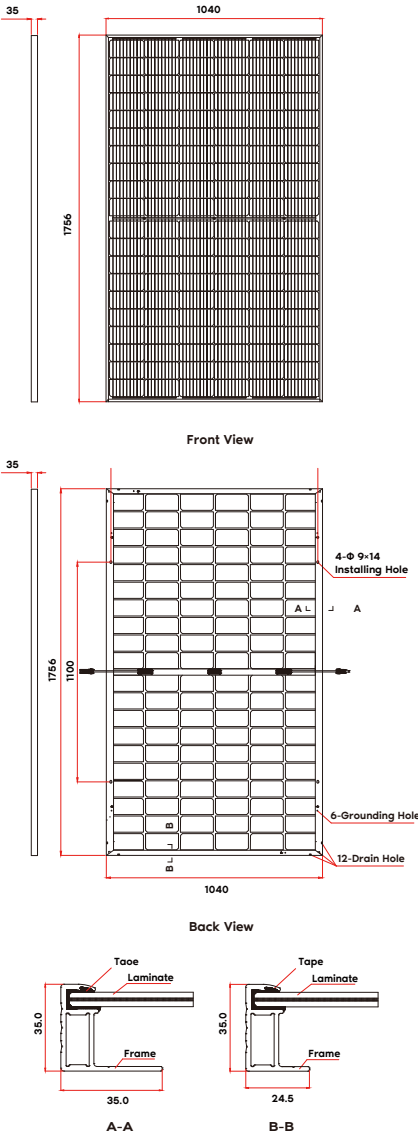
- Frame design makes module compatible with all racking and installation methods
- **Easy to handle and install as normal framed module during transportation**

SYSTEM CERTIFICATES

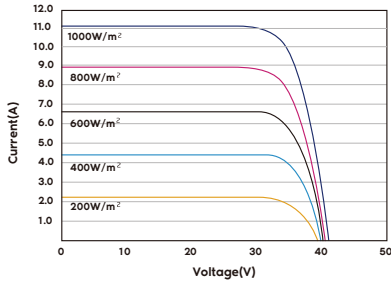
IEC61215/IEC61730/IEC61701/IEC62716
 ISO 9001: Quality Management System
 ISO 14001: Environmental Management
 ISO45001: Occupational Health and Safety



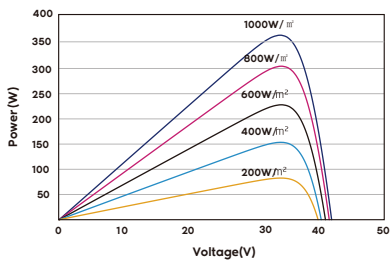
DIMENSIONS OF PV MODULE(mm)



I-V CURVES OF PV MODULE(360W)



P-V CURVES OF PV MODULE(360W)



ELECTRICAL DATA (STC)

Peak Power Watts-PMAX (Wp)*	360	365	370	375	380	385
Power Tolerance Range-PMAX (W)	0 - +5					
Maximum Power Voltage-VMPP (V)	33,9	34,1	34,3	34,5	34,70	34,90
Maximum Power Current-IMPP (A)	10,62	10,71	10,79	10,87	10,94	11,03
Open Circuit Voltage-VOC (V)	40,5	40,7	40,9	41,10	41,3	41,5
Short Circuit Current-ISC (A)	11,35	11,42	11,49	11,57	11,64	11,74
Module Efficiency η_m (%)	19,7	20	20,3	20,60	20,80	21,10

STC: Irradiance 1000W/m², Cell Temperature 25°C, Air Mass AM1.5.
 *Measuring tolerance: ±3%.

ELECTRICAL DATA (NMOT)

Maximum Power-PMAX (Wp)	272	277	280	282	286	290
Maximum Power Voltage-VMPP (V)	32,1	32,4	32,6	32,90	33,20	33,40
Maximum Power Current-IMPP (A)	8,49	8,54	8,59	8,64	8,69	8,74
Open Circuit Voltage-VOC (V)	38,6	38,8	41,1	39,50	40,00	40,60
Short Circuit Current-ISC (A)	8,95	9,01	12,79	9,11	9,15	9,21

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

MECHANICAL DATA

Solar Cells	Monocrystalline
Cell Orientation	120 cells (6 × 20)
Module Dimensions	1756×1040×35 mm(±1%)
Weight	20.3 KG
Front Glass	3,2 mm, High Transmission, AR Coated Heat Strengthened Glass
Encapsulant Material	POE/EVA
Back Glass	KPF Type
Frame	35mm Anodized Aluminium Alloy
J-Box	IP 68 rated and 30cm or (optional 120cm cable)
Cables	Photovoltaic Technology Cable 4.0mm ²
Connector	MC4

TEMPERATURE RATINGS

NMOT(Nominal Module Operating Temperature)	45°C (±2°C)
Temperature Coefficient of PMAX	-0.360 °C%
Temperature Coefficient of VOC	-0.304 °C%
Temperature Coefficient of ISC	0.050%/°C

MAXIMUM RATINGS

Operational Temperature	-40~+85 °C
Maximum System Voltage	1500V DC (IEC)
Max Series Fuse Rating	20A

WARRANTY

10 year Product Workmanship Warranty
25 year Power Warranty
2% first year degradation
0.45% Annual Power Attenuation

(Please refer to product warranty for details)

PACKAGING CONFIGURATION

Modules per box	32 pcs
Modules per 20' / 40' Container	384 / 876 pcs

