



FULL CELL 60 CELL

MONOCRYSTALLINE MODULE

315-340W

POWER OUTPUT RANGE

22.60%

MAXIMUM EFFICIENCY

0~+5W

BINNING TOLERANCE

5BB

BUSSBAR

PERC CELL TECHNOLOGY

PRODUCTS

Berlin Series

POWER RANGE

315-340W



HIGH POWER MODULE

High module conversion efficiency (up to 22.6%) , through superior manufacturing technology



POSITIVE TOLERANCE

Guaranteed 0~+5W positive power output tolerance ensures high reliability



SELF CLEANING

Anti-reflective, hydrophobic coating improves light absorption and reduces surface dust



STRONG AIR RESISTANCE

Entire module certified to withstand high wind loads (2400 Pascal) and snow loads (5400 Pascal)



HIGH PERFORMANCE

Excellent performance under low light environments (mornings, evenings and cloudy days)

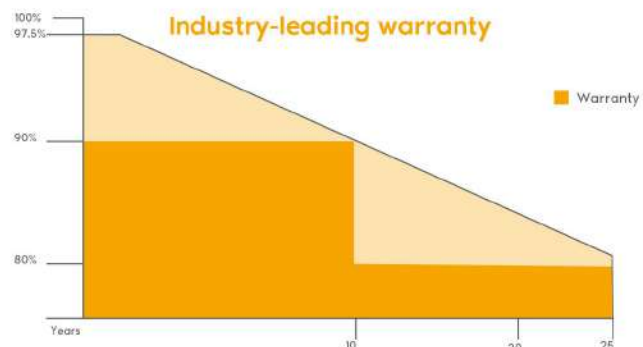
SYSTEM CERTIFICATES

IEC61215 / IEC61730 / IEC61701 / IEC62716

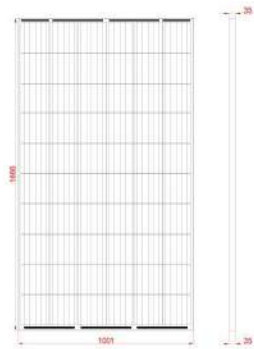
ISO 9001: Quality Management System

ISO 14001: Environmental Management

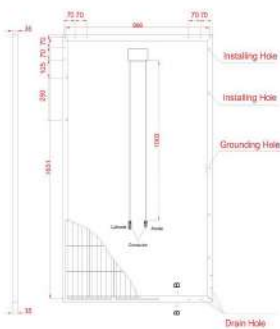
ISO45001: Occupational Health and Safety



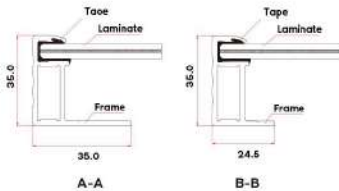
DIMENSIONS OF PV MODULE(mm)



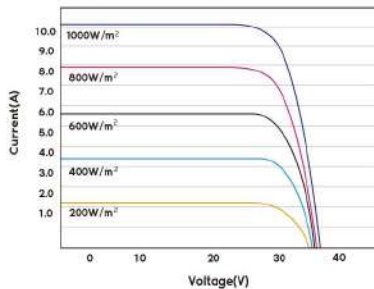
Front View



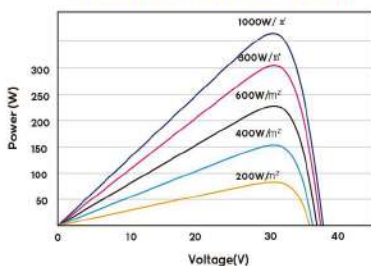
Back View



I-V CURVES OF PV MODULE(400W)



P-V CURVES OF PV MODULE(400W)



ELECTRICAL DATA (STC)

	320	325	330	335	340
Peak Power Watts-PMAX (Wp)*	320	325	330	335	340
Power Tolerance Range-PMAX (W)	0 - +5				
Maximum Power Voltage-VMPP (V)	31,8	31,8	34,32	34,41	34,5
Maximum Power Current-IMPP (A)	9,42	9,5	9,62	9,74	9,86
Open Circuit Voltage-VOC (V)	37,8	37,8	41,18	41,29	41,4
Short Circuit Current-ISC (A)	10,24	10,22	10,14	20,27	10,40
Module Efficiency η m (%)	19,3	19,5	19,79	20,09	20,39

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

ELECTRICAL DATA (NMOT)

	240	243	247,5	250	255
Maximum Power-PMAX (Wp)	240	243	247,5	250	255
Maximum Power Voltage-VMPP (V)	31,85	31,87	31,92	32,03	32,09
Maximum Power Current-IMPP (A)	7,61	7,68	7,75	7,88	7,95
Open Circuit Voltage-VOC (V)	36,01	36,25	38,71	38,85	38,92
Short Circuit Current-ISC (A)	8,05	8,25	8,30	8,45	8,51

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

MECHANICAL DATA

Solar Cells	Monocrystalline
Cell Orientation	60 cells (6 × 10)
Module Dimensions	1666×1001×35 mm (±1%)
Weight	19 KG
Front Glass	3,2 mm, High Transmission, AR Coated Heat Strengthened Glass
Encapsulant Material	POE/EVA
Back Sheet	KPF Type
Frame	35mm Anodized Aluminium Alloy
J-Box	IP67 / IP68 3 Diodes
Cables	Photovoltaic Technology Cable 4.0mm ² / 1000mm
Connector	MC4

TEMPERATURE RATINGS

NMOT(Nominal Module Operating Temperature)	45°C (±2 °C)
Temperature Coefficient of PMAX	-0.360% °C
Temperature Coefficient of VOC	-0.270% °C
Temperature Coefficient of ISC	0.040% °C

MAXIMUM RATINGS

Operational Temperature	-40 ~ +85 °C
Maximum System Voltage	1000V DC (IEC)
Max Series Fuse Rating	15A

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

