



Mono Bifacial Half Cell Module

650-675W MSTK-33

Key Product Features



High power output

Using 210mm size Mono wafer
Module power output up to 675W



Higher mechanical load capacity

Adopt high-strength aluminum alloy frame
Mechanical performance up to 5400 Pa positive load and 2400 Pa negative load



Bifacial design

Double-sided power generation
Power gain up to 5%~25%



High compatibility

Excellent system compatibility
Adapt to mainstream inverter and tracker



Low temperature coefficient

Peak power temperature coefficient
Excellent power generation performance in high temperature environment



Wide applicability

Harsh environments
Wider range of application



Excellent low-light performance

Better low-light power generation performance in low radiation environment such as haze and cloudy days



Low LCOE (Levelized Cost of Energy)

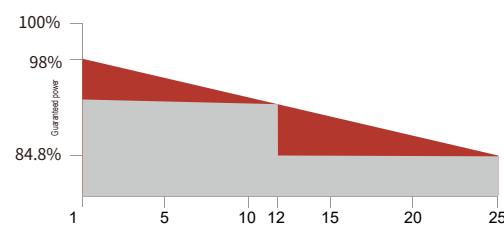
The cost of BOS reduced by 1.48%
LCOE reduced by 1.27%

Comprehensive product certification

- IEC61215-1(ed.1)
- IEC61215-1-1(ed.1)
- IEC61215-2(ed.1)
- IEC61730-1(ed.2)
- IEC61730-2(ed.1)
- UL 61730-1 1st Edition
- UL 61730-2 1st Edition



Industry-leading Quality Assurance



Linear power warranty

Industry Standard

● Please refer to the warranty letter for details



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Electrical Data(STC*)

Module Type: MSTK-33	650	655	660	665	670	675
Rate Maximum Power(Pmax)(W)	650	655	660	665	670	675
Open Circuit Voltage(Voc) (V)	45.45	45.58	45.72	45.85	45.98	46.11
Short Circuit Current(Isc) (A)	18.17	18.21	18.24	18.27	18.33	18.38
Maximum Power Voltage(Vmp)(V)	37.86	37.95	38.04	38.12	38.21	38.31
Maximum Power Current (Imp) (A)	17.18	17.27	17.36	17.45	17.54	17.63
Module Efficiency (%)	20.92	21.10	21.26	21.41	21.57	21.73

*Standard Test Conditions (STC) : irradiance of 1000 W/m², spectrum AM 1.5 and cell temperature of 25°C

Electrical Data(NMOT*)

Module Type: MSTK-33	650	655	660	665	670	675
Rate Maximum Power(Pmax)(W)	486.7	490.2	493.8	497.6	501.5	505.6
Open Circuit Voltage(Voc) (V)	42.6	42.7	42.9	43.0	43.1	43.2
Short Circuit Current(Isc) (A)	14.66	14.69	14.71	14.73	14.78	14.82
Maximum Power Voltage(Vmp)(V)	35.1	35.2	35.4	35.6	35.7	35.9
Maximum Power Current (Imp) (A)	13.87	13.91	13.95	13.99	14.04	14.09

*Nominal Module Operating Temperature (NMOT):irradiance of 800 W/m², spectrum AM 1.5, ambient temperature 20°C, wind speed 1 m/s.

Operational Parameter

Operating Temperature	-40°C~+85°C				
NMOT (Nominal Module Operating Temperature)	45±2°C				
Maximum System Voltage(V)	1500V DC				
Maxunum Fuse Current Rating(A)	35A				
Fire Safety	Class C				
Power Tolerance	0~+5W				
Bifacial Factor	70±5%				
PG. 660W	5%	10%	15%	20%	25%
Rate Maximum Power(Pmax)(W)	693	726	759	792	825
Open Circuit Voltage(Voc) (V)	45.72	45.72	45.72	45.72	45.72
Short Circuit Current (Isc) (A)	19.15	20.07	20.98	21.89	22.80
Maximum Power Voltage(Vmp)(V)	38.04	38.04	38.04	38.04	38.04
Maximum Power Current(Imp) (A)	18.23	19.09	19.96	20.83	21.70

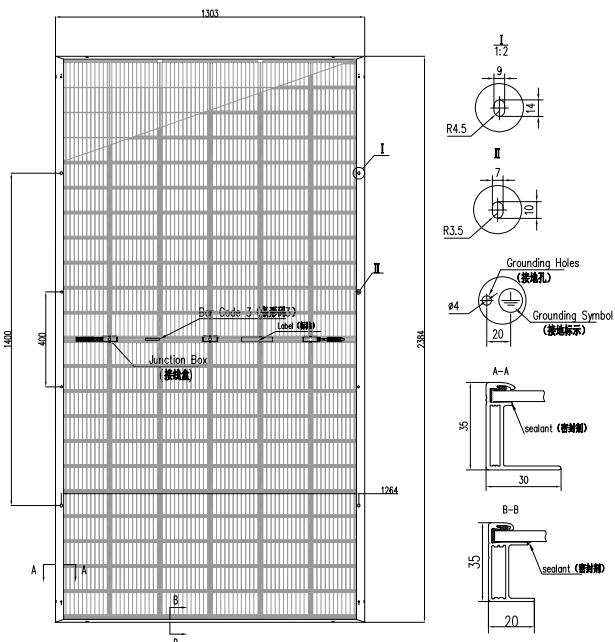
Mechanical Properties

Cell Type	P - type Mono-crystalline				
Number of Cells	132				
Dimension of Module	2384*1303*35mm				
Weight	33.9kg±5%				
Front Glass	3.2mm tempered glass with AR Coating				
Frame	Anodized aluminum alloy				
Junction Box	IP68(3 Diodes)				
Cable Length	+320mm , -260mm(4.0mm ²) ; or Customized Length				
Packing Information	558(31*18)pcs per 40'HQ				

Temperature Coefficient

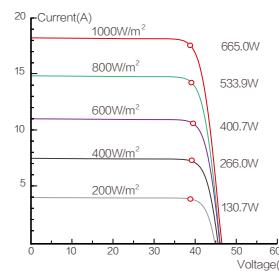
Peak Power Temperature Coefficient	-0.328%/°C
Open-Circuit Voltage Temperature Coefficient	-0.254%/°C
Short-Circuit Current Temperature Coefficient	0.041%/°C

Drawing

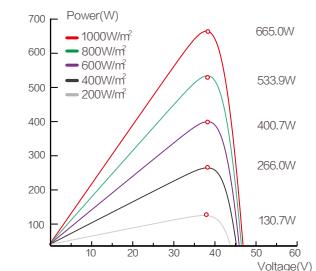


I-V curve

Current-Voltage Curve (665W)
Cells temp.=25°C



Power-Voltage Curve (665W)
Cells temp.=25°C



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DeclarationWith the technical progress and product updates, there exists a deviation between the technical parameter of the BYD Solar's future products and the technical parameter in this specification. The BYD Solar reserves the right to adjust the technical parameter at any time without notifying the customers, BYD Solar reserves the final right of interpretation.

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