



# BQ SOLAR

Better Quality • More profits



# BQ144-166BM

## 430~450W

Power output

## 144

Cells Mono-crystalline

## 0~+5W

Tolerance

## 20.7%

The Highest Efficiency

BQ144-166BM series is produced with high efficiency multi-busbar cells, which can reduce the module internal power loss to improve its conversion efficiency, as well as lower the failure risk caused by cracks and broken busbar to enhance the module reliability Combined with half-cell technology the module is highly resistant to hot-spot crisis caused by shadow effect.



### KEY FEATURES



High module conversion efficiency (up to 20.7%), through superior manufacturing technology



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



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



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



Suitable for harsh environments, such as coasts, deserts and lakes Withstand high level of wind loads(2400pa) and snow loads(5400pa)

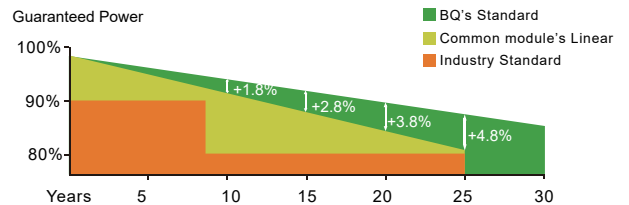
### LINEAR PERFORMANCE WARRANTY

12 YEAR

Product Warranty

30 YEAR

30 year Linear Power Warranty



Additional value from jahoray's Linear Warranty  
**0.5% Annual Degradation over 30 years**



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[www.bqsolartech.com](http://www.bqsolartech.com)





## ELECTRICAL DATA(STC)

Rated Power in Watts-Pmax(Wp)	430	435	440	445	450
Open Circuit Voltage-Voc(V)	49.60	49.80	50.00	50.20	50.40
Short Circuit Current-Isc(A)	11.09	11.16	11.23	11.30	11.37
Maximum Power Voltage-Vmp (V)	41.20	41.40	41.60	41.80	42.00
Maximum Power Current-Imp(A)	10.44	10.51	10.58	10.65	10.72
Module Efficiency (%)	19.90	20.10	20.30	20.50	20.70

STC Irradiance 1000 W/m<sup>2</sup>, Cell Temperature 25°C, Air Mass AM1.5 according to EN 60904-3

## ELECTRICAL DATA(NOCT)

Maximum Power-Pmax (Wp)	325.8	329.8	332.6	336.9	340.6
Open Circuit Voltage-Voc (V)	46.60	46.80	46.90	47.00	47.20
Short Circuit Current-Isc (A)	10.37	10.44	10.58	10.64	10.66
Maximum Power Voltage-Vmp(V)	38.20	38.40	38.50	38.60	38.80
Maximum Power Current-Imp(A)	8.53	8.59	8.64	8.73	8.78

NOCT: Irradiance at 800W/m<sup>2</sup>, Ambient Temperature 20°C, Wind Speed 1 m/s

## MECHANICAL DATA

Solar Cells	Mono-crystalline 166*83mm
Cell Configuration	144Cells (6x24)
Module Dimensions	2094x1038x35mm
Weight	26.3KG
Front Cover	2.0mm Tempered Glass
Frame Material	Anodized Aluminum Alloy
J-BOX	IP67 or IP68, 3Diodes
Cable	4mm <sup>2</sup> (IEC)/12AWG(UL), 300mm or customized
Connectors	MC4 or MC4 Comparable

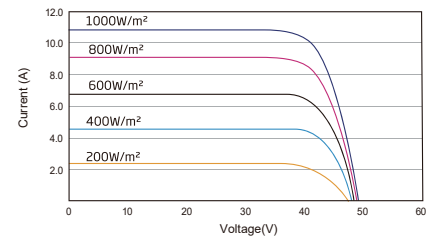
## TEMPERATURE & MAXIMUM RATINGS

Nominal Operating Cell Temperature(NOCT)	45°C± 2°C
Temperature Coefficient of Voc	-0.32%/°C
Temperature Coefficient of Isc	0.05%/°C
Temperature Coefficient of Pmax	-0.39%/°C
Operational Temperature	-40~+85°C
Maximum System Voltage	1500V(IEC)
Max Series Fuse Rating	20A

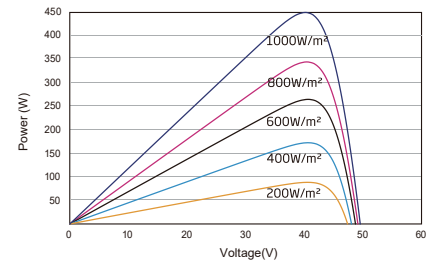
## PACKAGING CONFIGURATION

Container Size	40HQ
Modules Per Container	737pcs
Modules Per Pallet/Carton	31pcs/pallet, 5pcs/carton
Pallet/Carton Per Container	22pallets + 11cartons

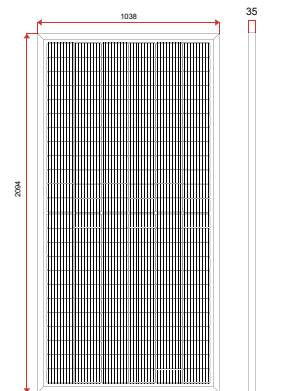
### I-V CURVES OF PV MODULE



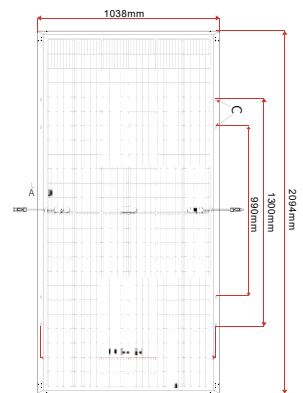
### P-V CURVES OF PV MODULE



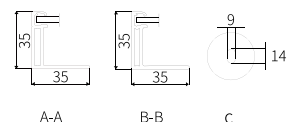
### DIMENSIONS OF PV MODULE(mm)



Front View



Back View



A-A

B-B

C

