

For a Free Quote:

Web: EnergyPal.com/solar

Call: 1-800-990-3725

Email: contact@energypal.com

EnergyPal

Solar Panel Guide Specification Data Sheet

**BQ Solartech Co., Ltd.
BQ 385-400 Half Cell
BQ400- HCP158**

Also available on the web at
EnergyPal.com/bq-solartech-co-ltd-solar-panels/bq400-hcp158



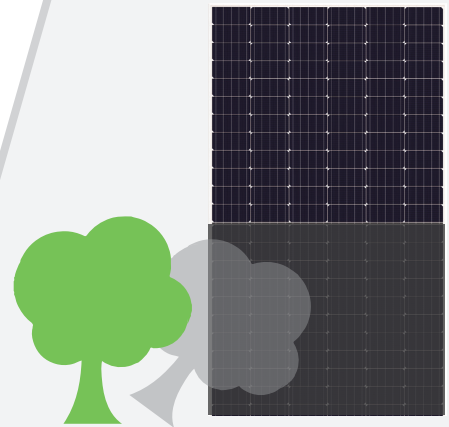
BQ385-400 HALF CELL

Features

- ✓ advanced technology to improve module efficiency, higher efficiency during cloudy days
- ✓ Perfect choice for utility and commercial, residential projects.
- ✓ Lower installation cost and limited power degradation
- ✓ excellent anti-PID performance
- ✓ Reduce power loss and hot spot effect
- ✓ Less mismatch loss

Half cell series comprise two separated and identical solar cell arrays, which means the ordinary strings of cells are cut into halves, and these shorter strings compose arrays which has separated current paths. When a module is shaded, only one side shaded array's current will be impacted, while the other array will still be functionally producing power. Under this circumstance, when a module is shaded, the affected working areas of half cell series will reduce 50%.

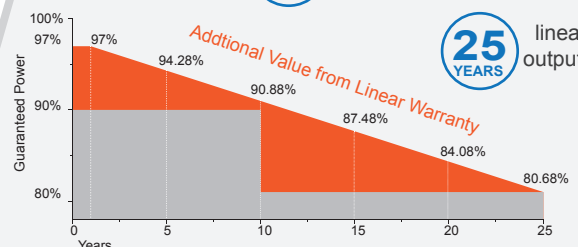
BQ Half Cell Module



Warranty

15 YEARS Guarantee on product material and workmanship

25 YEARS linear power output warranty

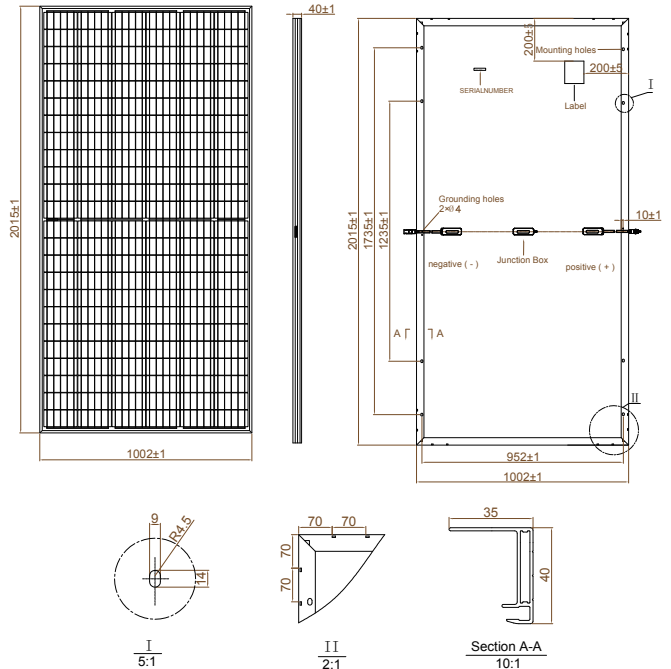


Temperature Characteristics

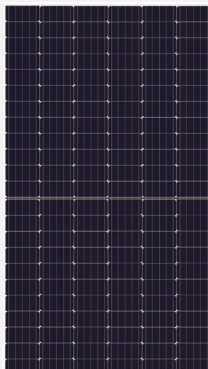
Pmax Temperature Coefficient	-0.38 %/°C
Voc Temperature Coefficient	-0.28 %/°C
Isc Temperature Coefficient	+0.05 %/°C
Operating Temperature	-40 ~ +85 °C
Nominal Operating Cell Temperature (NOCT)	45±2 °C

Mechanical Specifications

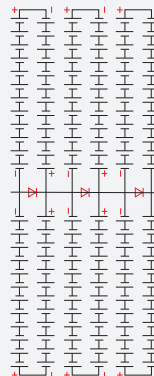
External Dimensions	2015 x 1002 x 40 mm
Weight	23.0kg
Solar Cells	PERC Mono crystalline 158.75 × 79.375 mm(144pcs)
Front Glass	3.2 mm AR coating tempered glass, low iron
Frame	Anodized aluminium alloy
Junction Box	IP68, 3 diodes
Output Cable	4.0 mm ² , Portrait:255mm(+)/355mm(-);Landscape:1200mm
Connector	MC4 Compatible
Mechanical Load	5400 Pa



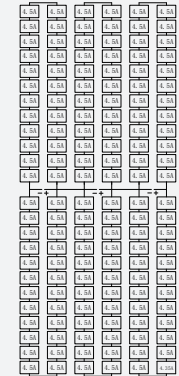
BQ320-335 Half Cell



Design Sketch



Circuit Diagram



Electrical Mismatch

Module current output is $4.5+4.35=8.85A$, current mismatch in series is **0.15A**

Module Type		BQ385- HCP158	BQ390- HCP158	BQ395- HCP158	BQ400- HCP158
Max power	Pm(WP)	385	390	395	400
Opencircuit voltage	Voc(V)	48.5	48.7	48.9	49.1
Short-circuit current	Isc(A)	9.87	9.95	10.03	10.1
Voltage at max power	Vmp(V)	41	41.2	41.4	41.6
Current at max power	Imp(A)	9.39	9.47	9.55	9.62
Module efficiency	(%)	19.07	19.32	19.56	19.81
Power Tolerance		(0,+4.98)			
System voltage	(V)	1000VDC/1500VDC			
Fuse Rating	(A)	20A			

