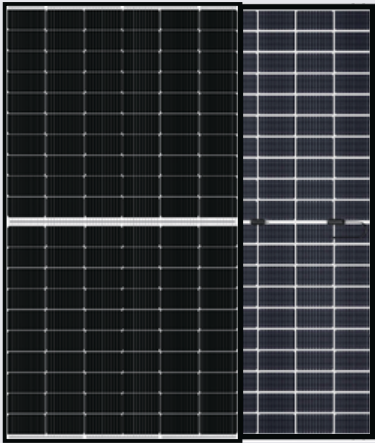
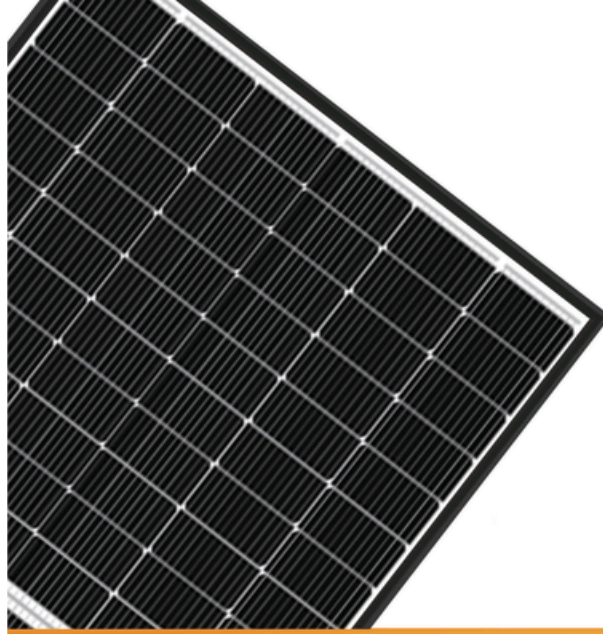




BULLS CONTRACTOR



120 Cells

Mono Half-Cut Bifacial
Double Glass Module

460W

Power output

21.32%

The Highest Efficiency

±3%

Isc, Voc, Pmax Tolerance

460W Power output



Fire class C

Consist of double-glass, with special design cells.
Outstanding anti-PID performance.



Elegant appearance & high performance

The bifacial module is of high light transmittance to ensure good performance, an advanced solution that enables more energy generation, light capturing and elegant appearance.



1500V system voltage

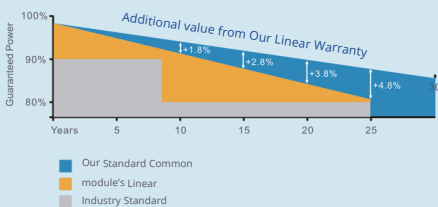
Maximum 1500V DC system voltage , excellent insulation performance and lower total system cost.



Double-sided power generation, higher income

The dual-glass module has a double-sided ratio of up to 80% gain of 7%-25% on the back side.

WARRANTIES



12 years

Product warranty on materials and workmanship

30 years

Linear power output warranty

CERTIFICATES IEC61215/61730

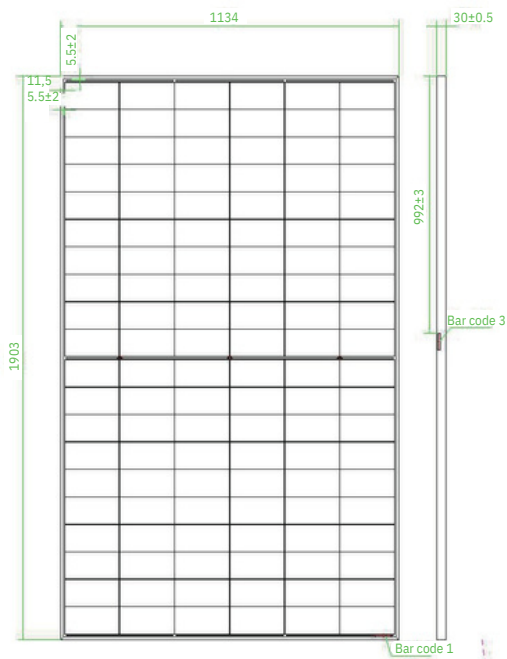


460W Power output



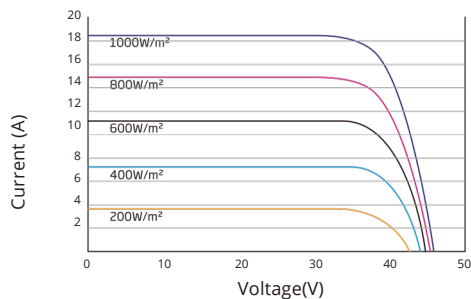
GLOBAL PROFESSIONAL PV PRODUCTS INTEGRATED SOLUTIONS SUPPLIER

ASSEMBLY DRAWING (Unit:mm)

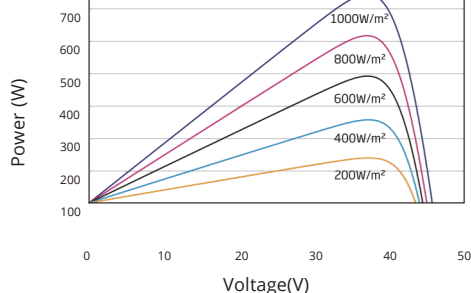


I-V CURVES

I-V CURVES OF PV MODULE



P-V CURVES OF PV MODULE



ELECTRICAL DATA(STC)

Rated Power in Watts-Pmax(Wp)	460
Open Circuit Voltage-Voc(V)	41.48
Short Circuit Current-Isc(A)	14.01
Maximum Power Voltage-Vmp(V)	34.20
Maximum Power Current-Imp(A)	13.45
Module Efficiency	21.32%

STC: Irradiance 1000 W/m², Cell Temperature 25°C, Air Mass AM1.5 according to EN 60904-3.

ELECTRICAL DATA(NOCT)

Maximum Power-Pmax(Wp)	342
Open Circuit Voltage-Voc (V)	39.15
Short Circuit Current-Isc(A)	11.32
Maximum Power Voltage-Vmp(V)	32.07
Maximum Power Current-Imp(A)	10.67

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

INTEGRATED POWER @STC(REFERENCE TO 10%)

Rated Power in Watts-Pmax(Wp)	506
Open Circuit Voltage-Voc(V)	45.63
Short Circuit Current-Isc(A)	15.41
Maximum Power Voltage-Vmp(V)	37.62
Maximum Power Current-Imp(A)	14.80
Module Efficiency	23.45%

MECHANICAL DATA

Solar cells	Mono-crystalline 182*91mm
Cell configuration	120cells(6*20)
Module dimensions	1903*1134*30mm
Weight	26.3kg
Frame	Anodised Aluminum
Front Cover	2.0+2.0mm Tempered Glass
J-BOX	IP68, 3 bypass diodes
Cable	4.0mm ² , 300mm

TEMPERATURE & MAXIMUM RATINGS

Nominal Operating Cell Temperature(NOCT)	45°C±2°C
Temperature Coefficient of Voc	-0.25%/°C
Temperature Coefficient of Isc	0.045%/°C
Temperature Coefficient of Pmp	-0.30%/°C
Operational Temperature	-40~+85°C
Maximum System Voltage	1000V(DC)/1500V(DL)
Max Series Fuse Rating	30A
Max. Wind Load / Snow Load	2400pa/5400pa
Fire Rating	Class C, Type 29

PACKAGING CONFIGURATION

Container 40'HQ	864pcs
Quantity / Pallet	36pcs