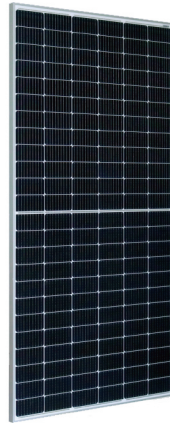


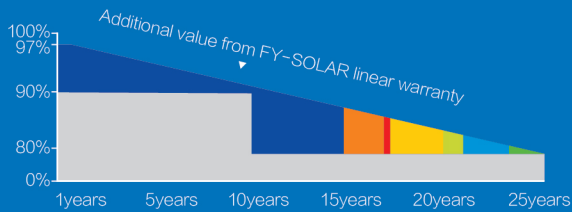
9BB Mono



FY-144-450MH

FY-144-430MH FY-144-435MH
 FY-144-440MH FY-144-445MH
 FY-144-450MH FY-144-455MH
 FY-144-460MH

Linear power guarantee provided by FY-SOLAR
Standard warranty



22%

output efficiency

10year

Material & Workmanship warranty

460W

Highest power output

25year

Linear power output warranty

Certifications for Incentives

- World-class manufacture of crystalline silicon photovoltaic modules
- Fully automatic facility and world -class technology
- Rigorous quality control to meet the highest standard: ISO9001:2015, ISO14001:2015 and OHSAS:18001 2007
- Tested for harsh environments(salt mist, ammonia corrosion and sand blowing test: IEC 61701, IEC 62716, DIN EN 60068-2-68)
- Long term reliability tests
2*100% inspection ensuring defect-free modules.

25 Year Linear Power Guarantee

- **Commercial**
10 years on material and manufacturing defects
- **Performance**
Power not less than 90% of power peak during the first 10 years
Power not less than 80% of power peak during the subsequent 25 years



Electrical Characteristics at STC

Type	FY-144-430MH	FY-144-435MH	FY-144-440MH	FY-144-445MH	FY-144-450MH	FY-144-455MH	FY-144-460MH
Maximum Power-Pmax(W)	430W	435W	440W	445W	450W	455W	460W
Tolerance Value for Power-%	0~+3%	0~+3%	0~+3%	0~+3%	0~+3%	0~+3%	0~+3%
Maximum Power Voltage-Vmpp(V)	40.76	40.97	41.16	41.36	41.56	41.76	41.96
Maximum Power Current-Imp(A)	10.55	10.62	10.69	10.76	10.83	10.89	10.96
Open Circuit Voltage-Voc(V)	49.07	49.27	49.47	49.67	49.87	50.11	50.35
Short Circuit Current-Isc(A)	11.02	11.09	11.16	11.23	11.32	11.33	11.40
Module Efficiency- η	19.78%	20.01%	20.24%	20.47%	20.70%	20.93%	21.16%

Performance at STC: Irradiance of 1000W/m² , Module temperature 77 ± 3.6°F(25 ± 2°C)AM 1.5 Power measurement tolerance: ± 3%

Electrical Characteristics at NOCT

Type	FY-144-430MH	FY-144-435MH	FY-144-440MH	FY-144-445MH	FY-144-450MH	FY-144-455MH	FY-144-460MH
Maximum Power-Pmax(W)	320W	323W	327W	330W	334W	338W	342W
Maximum Power Voltage-Vmpp(V)	37.83	38.00	38.21	38.38	38.38	39.20	39.40
Maximum Power Current-Imp(A)	8.46	8.50	8.56	8.60	8.60	8.63	8.68
Open Circuit Voltage(V)-Voc(V)	46.12	46.35	46.49	46.70	46.70	46.54	46.72
Short Circuit Current(A)-Isc(A)	8.94	8.99	9.05	9.10	9.10	9.28	9.33

Performance at NOCT: Irradiance 800W/m² , Ambient temperature 20°C, Wind speed 1m/S Power measurement tolerance: ± 3%

Temperature Coefficients(TC)

Temperature Coefficient of VOC(β)	-0.29%/°C
Temperature Coefficient of ISC(α)	+0.048%/°C
Temperature Coefficient of P max	-0.35%/°C

Permissible Operating Conditions

Maximum System Voltage	1000V
Operating Temperature Range	-40°C~+80°C
Maximum Surface Load Capacity	Test up to 5400pa according to IEC61215(Advanced test)
Resistance Against Hail	Maximum diameter of 1in.(25mm) impact speed of 51.5mph(23m/s)

Mechanical specifications

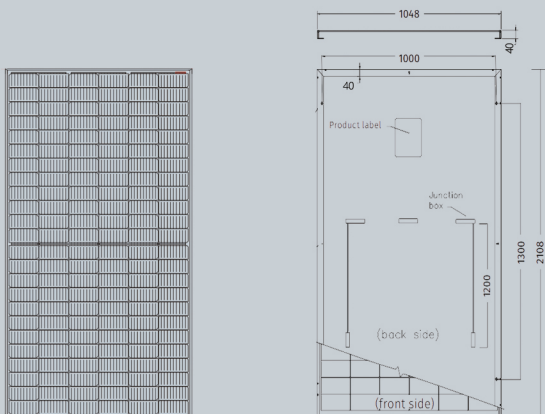
Cells	Monocrystalline cell with 9-busbars(166*83,6X24)
Junction Box	Ip67
Front Glass Thickness	3.2mm
Connecting Cable/Connector	MC4 compatible connector/TUV 1*4.0mm ² Length 1200mm or customized
Frame Dimension	2115×1050×35mm
Weight	24.3KG

Packing Features

Frame Height	35mm
Qty/pallet(pcs)	31
Qty/40HC container(PCS)	682

FY-144-450MH

Engineering Drawings



Electrical Performance & Temperature Dependence

