

MODULE

FSBB5 72HC MONO MODULE (5BB-158.75)



Excellent module power up to 415W



Excellent energy generation in weak light



Stable performance due to the IP67 waterproof junction box



0~+3% power output



PID free module
Anti-PID material
Anti-PID cell technology



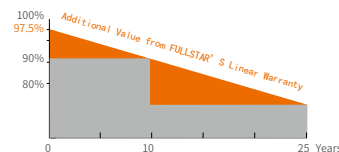
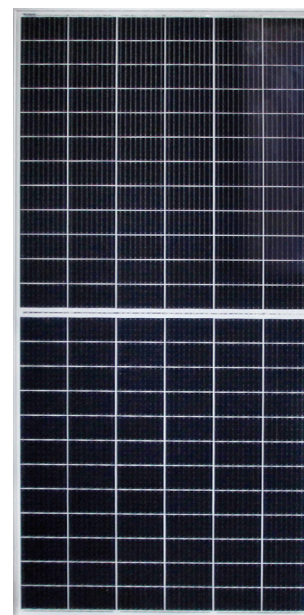
High module efficiency
lower floor space, BOS,
transportation and OPEX 8%

Certificate

- ◆ ISO 9001 Quality management system certifi and ISO 14001 Environmental management system certificate
- ◆ OHSAS 18001 International standards for occupational health and safety
- ◆ IEC 61215 and IEC 61730 A level certification



Additional value from Fullstar linear warranty lower annual power attenuation and higher reliability
> First year power attenuation 2.5% and annual power attenuation of 0.7% afterwards
> Over 80% power output warranty for 25 years



Item	FS-405M-Bb		FS-410M-Bb		FS-415M-Bb	
	Front	Back	Front	Back	Front	Back
Max. Power (Pmax)	405W		410W		415W	
Testing Condition	Front	Back	Front	Back	Front	Back
STC rated output (P _{mp} /Wp)*	405	285	410	289	415	292
Opt. Operating Current (Imp)	9.91A	6.94A	9.98A	6.99A	10.05A	7.04A
Opt. Operating Voltage (Vmp)	40.89V	41.10V	41.10V	41.31V	41.31V	41.52V
Short Circuit Current (Isc)	10.38A	7.28A	10.46A	7.33A	10.54A	7.39A
Open Circuit Voltage (Voc)	48.42V	46.99V	48.60V	47.17V	48.78V	47.34V
Module Efficiency	19.70%	13.90%	19.90%	14.00%	20.20%	14.20%
Module Power Tolerance	0/+3%					
Operating Temperature	-40°C ~ +85 °C					
Max. System Voltage	1500V DC(IEC)					
Max. Nominal Fuse Current	20A					
Application Level	A					
STC	Irradiance 1000W/m ² , Module temperature 25°C, AM1.5					
NOCT	Irradiance 800W/m ² , Module temperature 20°C, AM1.5, Wind speed 1m/s					

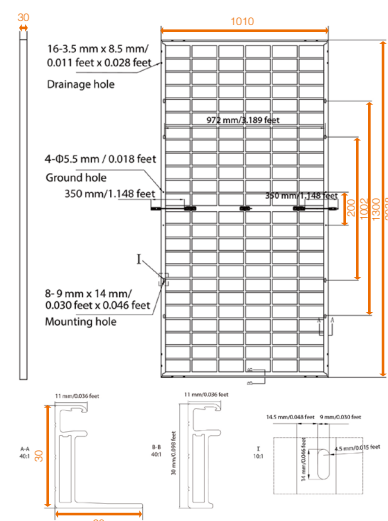
Temperature characteristics	
Nominal Operating Cell Temperature	44 ± 2°C
Temperature Coefficient (Pmax)	-0.3528%/°C
Temperature Coefficient (Voc)	-0.2769%/°C
Temperature Coefficient (Isc)	+0.0400%/°C

Mechanical Data	
Dimensions	2038 x 1010 x 30 mm
Weight	31.4 kg
Front Cover	Glass / POE / Glass, 2.5mm
Frame Material	Aluminum, silver anodized
J-Box	IP68, 3 diodes
Cable	Length 1200mm, 1 x 4mm ²
Connector	MC4 compatible

Other Characteristics	
Packaging	36 pcs/box; 792 pcs/40' container;
Warranty	10 year Product Workmanship Warranty 25 year Linear Power Warranty

Performance under low irradiation
Industry-leading performance under low irradiation conditions. The module efficiency of irradiance 200W/m² is above 96.5% of the irradiance 1000W/m² module efficiency.

Engineering Drawing



I-V Curves Of PV Module

