SOLAR PPM

SPPM-MG12-GG
580W - 600W

BIFACIAL DOUBLEGLASS MODULE



Worldwide Standard

IEC CE UL CERTIFIED มอก 61730 เล่ม 2-2567 | ISO 9001:2015 ISO 14001:2015 ISO 45001:2018

Key Features

Smart Technology G12
Monocrystalline silicon wafer

SMBB Technology
Better light trapping with multi busbar decreasing resistance and power loss

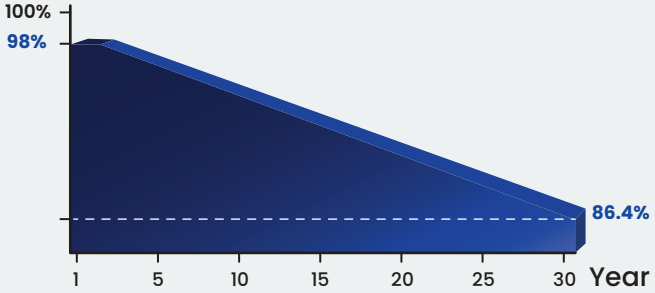
PID Resistance excellence
Anti-performance deterioration induced by negative potential to ground

Anti – reflective and anti- soiling
Reducing reflection loss and dust adhesion and improving power conversion efficiency (PCE)

1500 VDC IEC Compatibility
Safe measurement from series circuit connection up to 1500 voltage

PERC Technology
Passivated emitter and rear contact

Power Performance



Linear Performance Warranty

15 Year Product Warranty

30 Year Linear Power Warranty

0.40% Annual Degradation Over 30 years

Version 1.1

SOLAR PPM

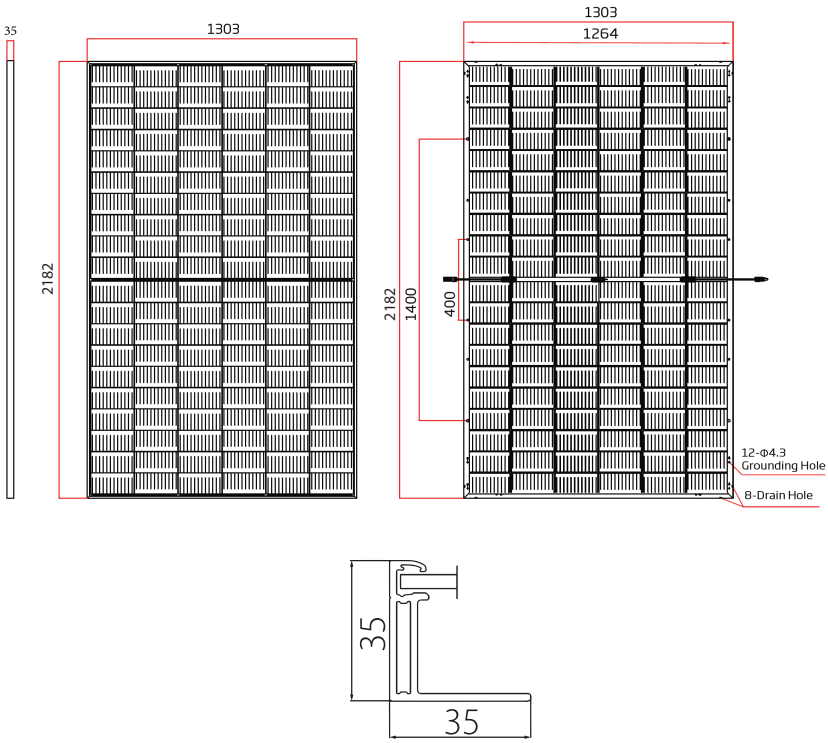
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MECHANICAL PARAMETERS

Cell (mm)	MONO-PERC 210 x 210
Weight (Kg)	35
Glass Thickness (mm)	4.0 Transparent, Low Iron , Heat Strengthened Glass
Dimensions (L x W x H)(mm)	2182 x 1303 x 35
Cable Cross Section Size (mm2)	4.0
No. of Cells and Connections	120 (6 x 10) x 2
Junction Box	IP68,3 Schottky diode
Connector	MC4 Compatible
Packaging Configuration	Anodized Aluminium Alloy

WORKING CONDITIONS

Maximum System Voltage	DC1500V (IEC)
Operating Temperature	-40˚C +85˚C
Maximum Series Fuse	30A
Maximum Static Load, Front(e.g., snow and wind)	5400Pa
Maximum Static Load, Back(e.g., wind)	5400Pa
NOCT	45+2 ˚C
Application Class	A
Fire Performance Class	Class C / Type 1



ELECTRICAL PARAMETERS

TYPE	SPPM-MG12-GG 580W	SPPM-MG12-GG 585W	SPPM-MG12-GG 590W	SPPM-MG12-GG 595W	SPPM-MG12-GG 600W
Rated Maximum Power at STC (W)	580	585	590	595	600
Open Circuit Voltage (Voc/V)	40.93	41.02	41.12	41.21	41.31
Maximum Power Voltage (Vmp/V)	34.73	34.86	35.00	35.10	35.22
Short Circuit Current (Isc/A)	17.75	17.78	17.84	17.87	17.95
Maximum Power Current (Imp/A)	16.71	16.79	16.88	16.96	17.07
Module efficiency (%)	20.32%	20.49%	20.67%	20.84%	21.02%
Power tolerance	-0 to +5 Watt				
Temperature Coefficient of Isc	0.07%/ ˚C				
Temperature Coefficient of Voc	-0.26%/ ˚C				
Temperature Coefficient of Pmax	-0.35%/ ˚C				
STC	Irradiance 1000W/m², Cell Temperature 25˚C, Air Mass 1.5				

NOCT

TYPE	SPPM-MG12-GG 580W	SPPM-MG12-GG 585W	SPPM-MG12-GG 590W	SPPM-MG12-GG 595W	SPPM-MG12-GG 600W
Maximum Power (Pmax) (W)	438.65	442.37	446.73	449.99	454.53
Open Circuit Voltage (Voc/V)	38.61	38.70	38.79	38.88	38.97
Maximum Power Voltage (Vmp/V)	32.24	32.37	32.50	32.59	32.70
Short Circuit Current (Isc/A)	14.30	14.33	14.38	14.41	14.47
Maximum Power Current (Imp/A)	13.60	13.67	13.74	13.81	13.90
Condition	Under Normal Operating Cell Temperature, Irradiance of 800W/m², Spectrum AM1.5, ambient temperature 20˚C, wind speed 1 m/s				

PACKAGE CONFIGURATION

Modules per box: 31 pieces Modules
per 40' container: 620 pieces

Version 1.1

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