



MARS

GSP7G54M-415W

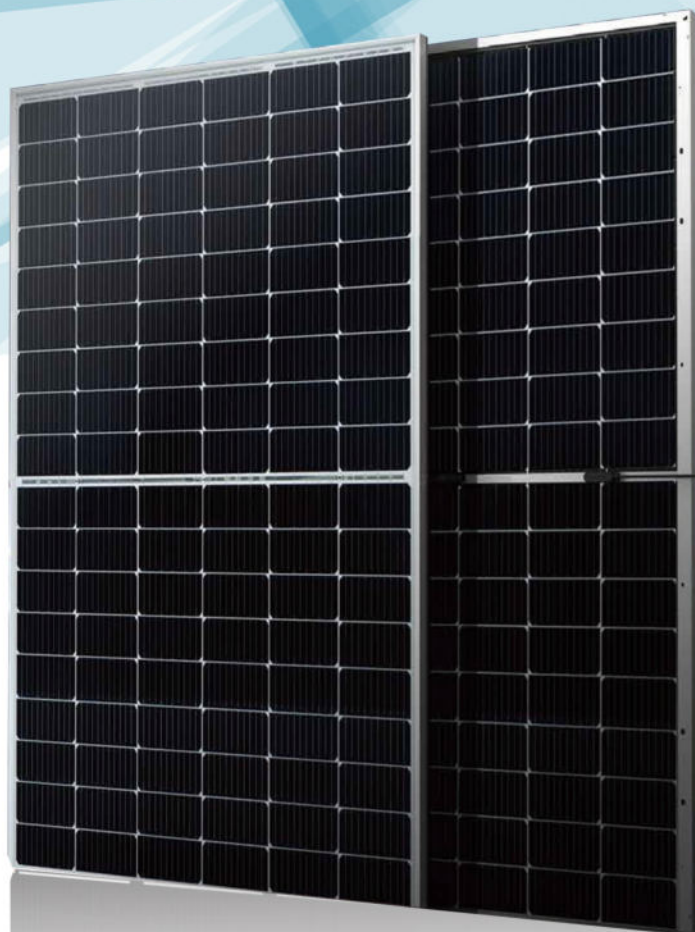
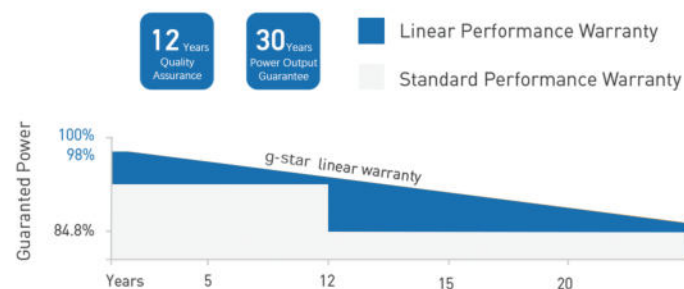
Bifacial
10BB Half-cut Mono Perc

SYSTEM & PRODUCT CERTIFICATES

- IEC 61215 / IEC 61730 / UL 61730
- ISO 9001: 2015 Quality Management System
- ISO 14001: 2015 Environment Management System
- ISO 45001: 2018 Occupational Health and Safety Management Systems



PERFORMANCE WARRANTY



KEY FEATURES



10BB Half-cut Cell Technology

New circuit design, lower internal current, lower R_s loss
Ga doped wafer, attenuation $< 2\%$ (1st year) / $\leq 0.45\%$ (Linear)



Industry Leading High Yield

Bifacial PERC cell technology,
5%-25% more yield depends on different conditions



Excellent Anti-PID Performance

2 times of industry standard Anti-PID test



Wider Application

No water-permeability and high wear-resistance,
can be widely used in high-humid, windy and dusty area



IP68 Junction Box

High waterproof level

Electrical Characteristics

Testing Condition	STC	NMOT	STC	NMOT	STC	NMOT	STC	NMOT	STC	NMOT
Maximum Power(Pmax/W)	395	294	400	298	405	302	410	306	415	310
Operating Voltage (Vmpp/V)	30.85	28.8	31.05	29.0	31.24	29.2	31.43	29.3	31.64	29.6
Operating Current (Impp/A)	12.81	10.23	12.89	10.30	12.97	10.36	13.05	10.42	13.13	10.48
Open-Circuit Voltage (Voc/V)	36.75	34.6	37.00	34.8	37.25	35.1	37.50	35.3	37.75	35.5
Short-Circuit Current (Isc/A)	13.69	11.04	13.78	11.11	13.86	11.17	13.94	11.24	14.02	11.30
Module Efficiency[%]	20.22		20.48		20.73		21.00		21.25	

Mechanical Characteristucs

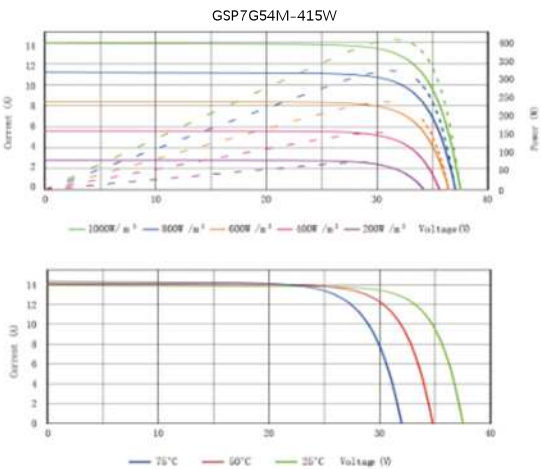
Pmax gain	5%	10%	15%	20%	25%
Pmax/W	431	451	472	492	513
Vmpp/V	31.43	31.43	31.43	31.43	31.43
Impp/A	13.70	14.36	15.01	15.66	16.31
VocV	37.50	37.50	37.50	37.50	37.50
Isc/A	14.65	15.35	16.04	16.74	17.44

Mechanical Characteristucs

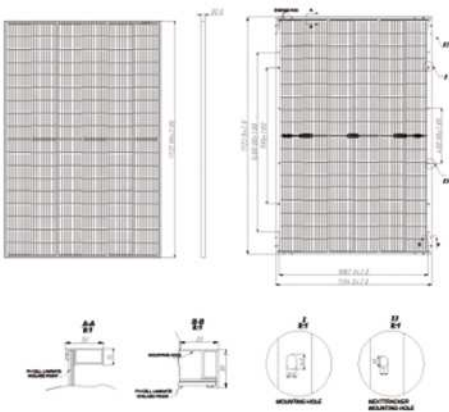
Temperature Coefficient of Pmax	-0.35%/° C
Temperature Coefficient of Voc	-0.26%/° C
Temperature Coefficient of Isc	+0.048%/° C
Nominal Module OperatingTemperature(NMOT]	43±2° C

Application Conditions

Cell Type	Monocrystalline
No. of Cells	108pcs in series (6*18)
Module Dimensions	1722*1134*30mm (67.80*44.65*1.18inches)
Weight	21.5kg(47.41lbs.)
Glass	3.2mm AR Coating Tempered Glass
Frame	Anodized Aluminium Alloy
Junction Box	IP68, 3 Bypass Diodes
Output Cables	4mm ² (IEC), 12AWG(UL)300mm in Length or Customized Length
Connectors	MC4/MC4-EV02



Technical Drawings



Temperature Characteristics

Maximun System Voltage	1500V/DC
Operating Temperature	-40° C+85°
Maximun Series Fuse	30A
Safety Protection Class	ClassII
Mechanical Load	Front side 5400Pa Back side 2400Pa
Refer. Bifaciality Factor	70%±5%



The specification and key features described in this datasheet may deviate slightly and are not guaranteed. Due to ongoing innovation, R&D enhancement, AG. reserves the right to make any adjustment to the information described herein at any time without notice. Please always obtain the most recent version of the datasheet which shall be duly incorporated into the binding contract made by the parties governing all transactions related to the purchase and sale of the products described herein.