MAGNUS
GREEN SOLAR

Built to Outperform

N-TYPE SERIES

MGS 72M16

555-595W

- High Saving Lower LCOE, reduced BOS cost, shorter payback time
- High Efficiency: Excellent module conversion efficiency of up to 23.03%
- Better Weak Illumination Response Higher power output even under low-light environments like on cloudy or foggy days
- LOW LID (Light Induced Degradation) N-Type Solar cell Technology offers Lower-LeTID & LID
- PID Resistance Excellent Anti-PID Performance guarantee limited power degradation for mass production
- 10-30% Additional Power Generation More than 10-30% additional power gain comparing with the regular modules.
- Wider Applicability More application scenes like BIPV, vertical installation, snowfield, high-humid, windy and dusty area
- Designed & engineered in the U.S, Made in Dubai

Certifications:

Intertek

DEKRA certified

12 YEARS MATERIAL & PROCESSING

30 YEARS PERFORMANCE WARRANTY

Headquarter address

Magnus Green Solar LLC, 360 E 2nd St, STE 820, Los Angeles, CA 90012 USA

+1-888-259-4196

info@magnusgreensolar.com

Manufactured at:

Magnus Green Solar Panels Manufacturing, National Industries Park, Plot TP010505, Jebel Ali(South), Dubai, United Arab Emirates

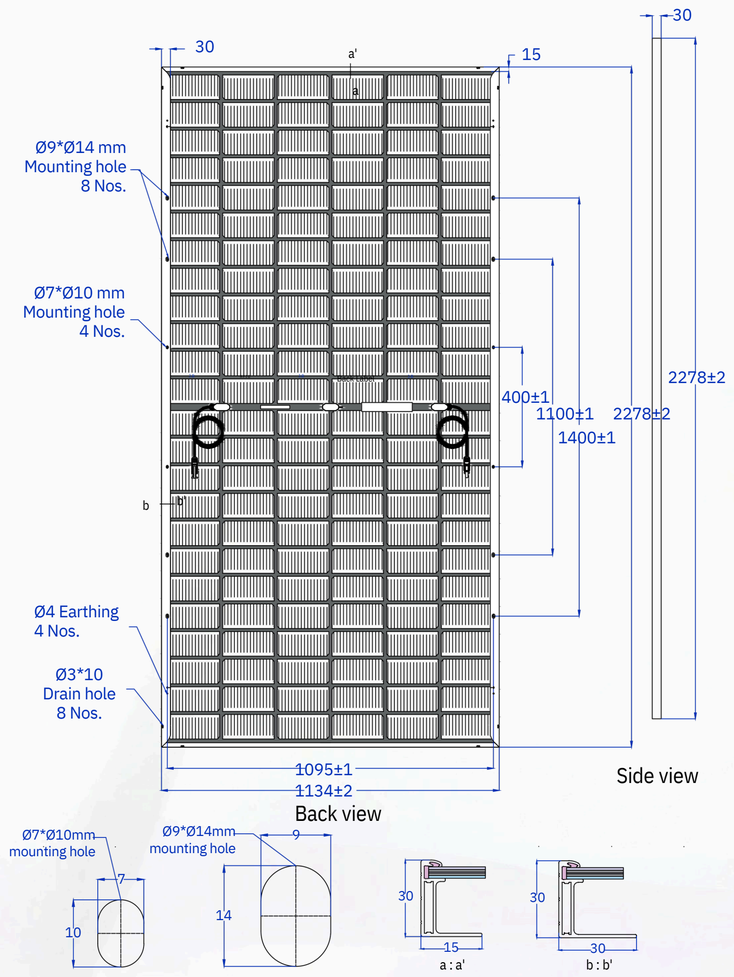
+971 50 786 3131

info@magnusgreensolar.com

www.magnusgreensolar.com

MECHANICAL SPECIFICATIONS

Cell Type	N-Type Monocrystalline
Weight	31.5kg
Dimension	2278x1134x30mm (L x W x T)
Cables	4 mm2 , Solar Cable 400mm/1400mm length or Customized length
No. of Cells	144 (72x2)
Front Glass	2.0 mm, High Transmission, AR Coated, Tempered Glass
Back Glass	2.0 mm, Heat Strengthened Glass, High Transmission, AR Coated
Junction Box	IP68 certified, 3 Bypass Diodes.
Packing	36 pcs/pallet, 720 pcs/ 40 HQ
Connector Type	MC4 / MC4 compatible / Staubli Electrical connectors
Encapsulation	PID & UV resistance
Frame	Anodized Aluminium Alloy



"Unspecified dimensions tolerance are according to ISO 2768-1, class m."

ELECTRICAL SPECIFICATIONS

Electrical Parameter at STC	Bifacial Monocrystalline Module						
Module Type	MGS -N						
Capacity rating – Pmax(Wp)	565W-72H	570W-72H	575W-72H	580W-72H	585W-72H	590W-72H	595W-72H
Power Tolerance (%) Module	0~2						
efficiency (%) Rated voltage -	21.88	22.07	22.26	22.45	22.64	22.83	23.03
Vmp(V) Rated current -	42.60	42.80	43.00	43.20	43.40	43.60	43.80
Imp(A) Open circuit voltage -	13.27	13.32	13.37	13.42	13.47	13.52	13.57
Voc(V)	50.88	51.08	51.28	51.48	51.68	51.88	52.08
Short circuit current - Isc(A)	14.18	14.24	14.30	14.36	14.42	14.48	14.54

Under Standard Test Conditions (STC) of irradiance 1000 W/m², spectrum AM 1.5 and Module temperature of 25°C. Except Pmax, all other parameters have a tolerance of ±3%.

Electrical Specification with 10% rear side power gain#

Capacity rating – Pmax(Wp)	621	627	633	638	644	649	655
Rated voltage - Vmp(V) Rated	42.60	42.80	43.01	43.22	43.40	43.60	43.80
Current - Imp(A)	14.59	14.65	14.71	14.76	14.82	14.87	14.93
Open circuit voltage - Voc(V)	50.88	51.08	51.28	51.48	51.68	51.88	52.08
Short circuit current - Isc(A)	15.59	15.66	15.73	15.80	15.86	15.93	15.99

Additional power gain from rear side compared to power of front side at STC depends on mounting structure (height, tilt angle etc.) and reflectivity of ground. Bi-Faciality Factor : 80 ± 5 %

MAXIMUM RATINGS

Maximum system Voltage	1500V DC
Operating Temperature	- 40°C to 85°C
Maximum Series Fuse	30A
Electrical Safety	Class II
Fire Rating	Class C (Type 1)
Static Loading	Snow Loading: 5400Pa/ Wind Loading: 2400Pa
Hail resistance	Max. diameter of 25 mm with velocity 23 m/s
NOCT Temperature	45°C±2°C

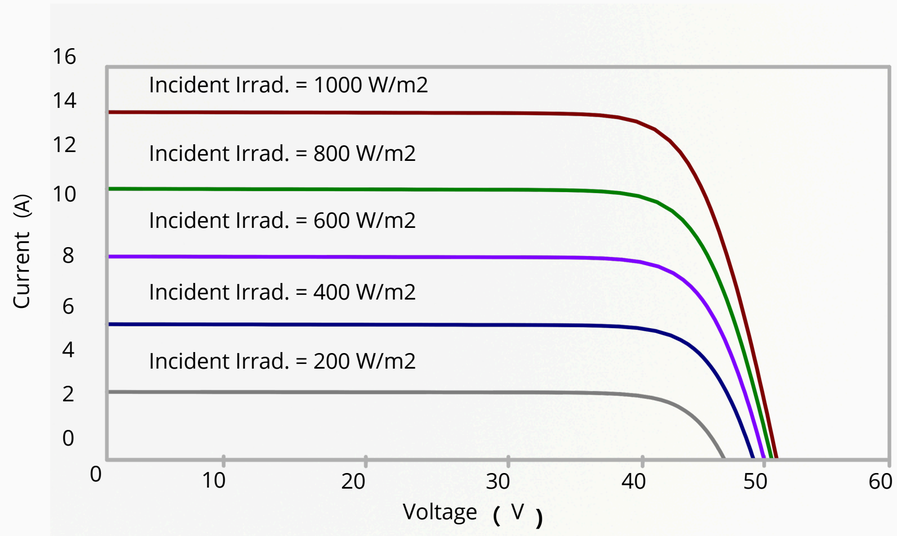
TEMPERATURE CHARACTERISTICS

Temperature Coefficient (Pmax)	-0.30% /°C
Temperature Coefficient (Voc)	-0.25 %/°C
Temperature Coefficient (Isc)	0.45%/°C

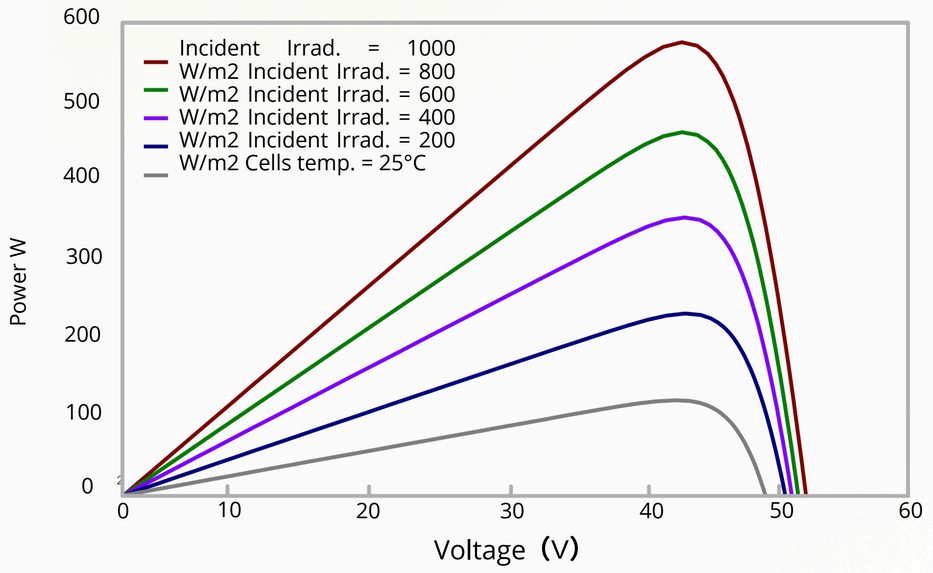
PERFORMANCE WARRANTY

Max Power Degradation 0.5%/Year
97.5% At The End of 1st Year
93% At The End of 10th Year
85.5% At The End of 30th Year

CURVE & TEMPERATURE DEPENDENCE



IV CURVE



PV CURVE

Specifications included in the datasheet are subject to change without notice