



# MTPL - MFC - SERIES

520W To 560W



**High Savings**, Reduced BOS costs,  
Shorter Payback Time



Superior Module Technology with  
**High Module Efficiency upto 21.70%**



**Better Performance**  
under all climatic conditions



Excellent Outdoor  
**Power Generation**



**Suitable for rooftop, ground  
mount & distributed Projects**



**Split IP 68**  
Junction box

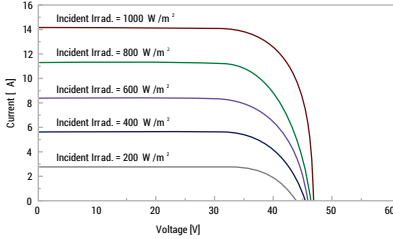


**M10 Mono  
PERC cells**

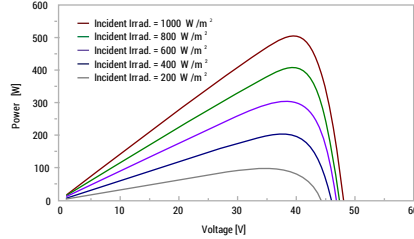


**PID resistant** with  
long term reliability

**IV Curve**



**PV Curve**

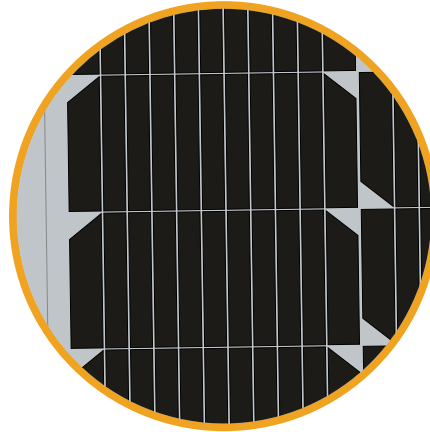


**12  
YEARS**

**12 YEARS**  
Product Warranty

**30  
YEARS**

**30 YEARS**  
Performance Warranty



## Applications



**Residential**



**Commercial**



**Utility**



**Off-grid**

## The Industry's Footprint

We, Maglare Technologies Pvt Ltd (MTPL), is providing reliable and cost effective energy solutions with focus on "know how" of emerging PV technologies of solar modules and implement them in methodical manner. This keeps us ahead in photovoltaic industry with the best quality products along with high poweroutput and long term reliability.

### Product Certifications:



(Certifications are in progress)\*

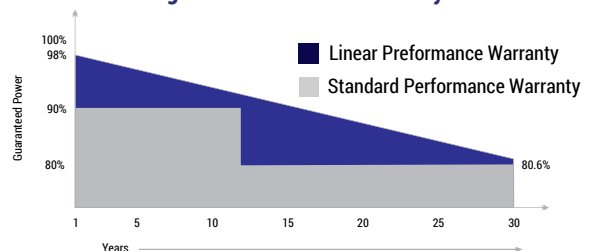
\*We have applied for below certifications:

IEC 61215:2016, IEC 61730:2016, IS 14286:2010/IEC 61215:2005, IS/IEC 61730-1&2:2004  
UL 61730-1&2, IEC 61701, IEC 62716, IEC 62804, IEC 60068-2-68, CEC

### Management Certifications:

ISO 9001 : 2015 | ISO 14001 : 2015 | ISO 45001 : 2018

### Maglare Performance Warranty:



### Technical Data

Model Name	MT-MFC 520	MT-MFC 525	MT-MFC 530	MT-MFC 535	MT-MFC 540	MT-MFC 545	MT-MFC 550	MT-MFC 555	MT-MFC 560
Capacity rating - Pmax(Wp)	520	525	530	535	540	545	550	555	560
Rated voltage - Vmp(V)	41.07	41.30	41.52	41.77	41.99	42.22	42.44	42.67	42.86
Rated current - Imp(A)	12.67	12.72	12.77	12.82	12.87	12.92	12.96	13.01	13.07
Open circuit voltage - Voc(V)	49.83	50.03	50.22	50.42	50.62	50.81	50.91	51.02	51.13
Short circuit current - Isc(A)	13.16	13.22	13.25	13.29	13.34	13.37	13.40	13.43	13.67
Module efficiency (%)	20.15	20.34	20.53	20.73	20.92	21.12	21.31	21.50	21.70

Standard Test Conditions (STC) - 1000 W/m<sup>2</sup> irradiance, Air Mass 1.5 and 25°C cell temperature

### Operating Parameters

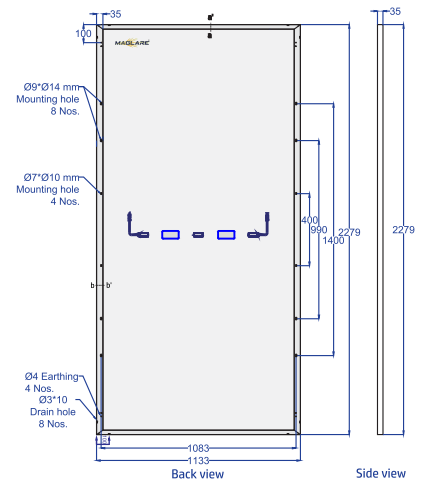
Operational Temperature	-40°C to +85 °C
Power Output Tolerance	0-2 (%)
Maximum System Voltage	1500V
Maximum Series Fuse Rating	25A
Nominal Operating Cell Temperature (NOCT)	45±2°C
Electrical Safety	Class II
Fire Safety	Class C (Type 1)
Application Class	Class A

### Electrical Parameter at NOCT

Model Name	MT-MFC 520	MT-MFC 525	MT-MFC 530	MT-MFC 535	MT-MFC 540	MT-MFC 545	MT-MFC 550	MT-MFC 555	MT-MFC 560
Capacity rating - Pmax(Wp)	385	389	392	396	400	403	407	410	413
Rated voltage - Vmp(V)	38.30	38.52	38.72	38.94	39.16	39.36	39.57	39.77	39.96
Rated current - Imp(A)	10.06	10.10	10.13	10.17	10.22	10.24	10.29	10.31	10.34
Open circuit voltage - Voc(V)	46.60	46.79	46.97	47.13	47.34	47.51	47.61	47.71	47.81
Short circuit current - Isc(A)	10.60	10.64	10.66	10.69	10.74	10.76	10.79	10.82	10.86

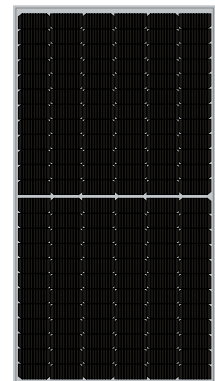
Irradiance 800 W/m<sup>2</sup>, ambient temperature 20°C, Module temperature 45°C, wind speed 1 m/sec

### Mechanical Dimensions



### Mechanical Parameters

Length x Width x Thickness (L x W x T)	2279 mm (L) x 1133 mm (W) x 35 mm (T)
Weight	~28 kgs
Solar Cells per Module (Units) / Arrangement	144 cells / (12x6    12x6)
Solar Cell Type & Size	Mono PERC, 91 x 182 mm
Front Glass	3.2 mm Low Iron & Tempered glass with ARC coating
Encapsulate	PID Free & UV Resistant
Junction Box (Protection degree/ Material)	IP68 / Weatherproof PPO
Cable & Connector (Protection degree / Type)	IP68 rated / MC4 compatible
Cable cross - section & Length	4 mm <sup>2</sup> & 500mm
Cable cross - section & Length	Anodized Aluminium Alloy



### Mechanical Loading

Front Side Maximum Static Loading	5400Pa
Rear Side Maximum Static Loading	2400Pa
Hail resistance	25mm Hailstone at the speed of 23m/s

### Temperature Ratings (STC)

Temperature Coefficient of Isc, α (%/°C)	0.048
Temperature Coefficient of Voc, β (%/°C)	-0.285
Temperature Coefficient of Pmax, γ (%/°C)	-0.34

- Quantity of modules/container may get changed without prior notice. Confirm with our sales representative before placing order.
- The electrical data given here is for reference purpose only.
- Before placing order confirm your requirement with our sales representative.
- Refer installation Manual instructions & Maglare warranty statement for terms & conditions.
- Due to constant product modifications, Maglare reserves the right to amend the above specifications without prior notice.
- Dispose of a product as e-waste after the end of its working life.
- Images in the datasheet are for representation purpose only.