



# TP-575-GG 550-575W

**N-Type TOPCon-144cell-M10 Dual Glass**  
**Maximum Efficiency 22.3%**  
**Positive Power Tolerance 0~+5W**

### 10-30% Additional Power Generation

30 years lifespan brings 10-30% additional power generation

### Zero LID

N-type solar cell has no LID naturally which can increase power generation

### Lower LCOE

Up to 25% more power generation in bifacial type (depending on Albedo)

### Better Weak Light Performance

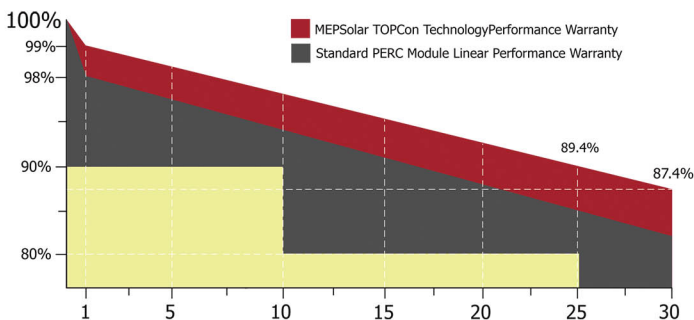
Higher power output even under low-light environment like on cloudy or foggy days

### Lower Temperature Coefficient

Better performance of the solar panel in higher temperature environment or hot days

### More Weather Resistance

Resistant to harsh environment such as salt, ammonia, sand, high temperature and high humidity



## Product & System Certificates

IEC61215/IEC61730

ISO9001 : Quality Management System

ISO14001 : Environment Management System



## Mana Energy Pak

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### Electrical Specification (STC) - Front Side

STC: AM1.5 1000W/m<sup>2</sup> 25°C [Test Uncertainty: ±3%]

Model	TP-575-GG 550	TP-575-GG 555	TP-575-GG 560	TP-575-GG 565	TP-575-GG 570	TP-575-GG 575
Max Power P <sub>mp</sub> [W]	550	555	560	565	570	575
Max Power Voltage V <sub>mp</sub> [V]	41.64	41.79	41.95	42.14	42.29	42.44
Max Power Current I <sub>mp</sub> [A]	13.22	13.29	13.35	13.41	13.48	13.55
Open Circuit Voltage V <sub>oc</sub> [V]	50.27	50.47	50.67	50.87	51.07	51.27
Short Circuit Current I <sub>sc</sub> [A]	14.01	14.07	14.13	14.19	14.25	14.31
Efficiency [%]	21.3	21.5	21.7	21.9	22.1	22.3

\*Positive Power Tolerance 0~+5W

### Electrical Specification (NMOT) - Front Side

NMOT: 800W/m<sup>2</sup> 20°C 1m/s [Test Uncertainty: ±3%]

Model	TP-575-GG 550	TP-575-GG 555	TP-575-GG 560	TP-575-GG 565	TP-575-GG 570	TP-575-GG 575
Max Power P <sub>mp</sub> [W]	413	417	421	424	428	432
Max Power Voltage V <sub>mp</sub> [V]	39.13	39.26	39.39	39.52	39.65	39.78
Max Power Current I <sub>mp</sub> [A]	10.57	10.63	10.69	10.75	10.81	10.87
Open Circuit Voltage V <sub>oc</sub> [V]	47.75	47.94	48.13	48.32	48.51	48.70
Short Circuit Current I <sub>sc</sub> [A]	11.32	11.37	11.41	11.46	11.50	11.55

### Bifaciality Power Generation Gain (Regarding 575W as an example)

Power Gain [%]	0	5	10	15	20	25
Max Power P <sub>mp</sub> [W]	575	604	633	661	690	719
Max Power Voltage V <sub>mp</sub> [V]	42.44	42.50	42.50	42.50	42.60	42.60
Max Power Current I <sub>mp</sub> [A]	13.55	14.21	14.88	15.56	16.20	16.87
Open Circuit Voltage V <sub>oc</sub> [V]	51.27	51.40	51.40	51.40	51.50	51.50
Short Circuit Current I <sub>sc</sub> [A]	14.31	14.97	15.75	16.43	17.11	17.83

### Mechanical Data

Solar Cell	N-Type 182mm x 91mm - [12x12]
Module Dimension	2278x1134x30 mm
Weight	32.5kg
Front Cover	Glass - 2mm Semi Tempered AR Coated
Back Cover	Glass - 2mm Semi Tempered
Frame	Silver - Anodized Aluminium Alloy
Junction Box	IP68 Rated - 3 Bypass Diodes
Cable	4.0m <sup>2</sup> - 300mm

### Temperature Ratings

Temperature Coefficient	I <sub>sc</sub>	α	[%/°C]	+0.046
Temperature Coefficient	V <sub>oc</sub>	β	[%/°C]	-0.25
Temperature Coefficient	P <sub>max</sub>	γ	[%/°C]	-0.30
Nominal Module Operating Temperature	NMOT		[°C]	43 ± 2

### Operating Properties

Max System Voltage	1500V
Max System Fuse Rating	30 A
Operational Temperature	-40 to +85 °C
Bifaciality Tolerance	±5%
Bifaciality = P <sub>maxrear</sub> (STC)/P <sub>maxfront</sub> (STC)	80%

### Packaging Information

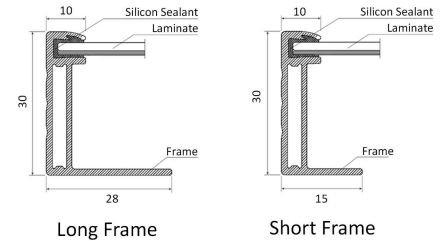
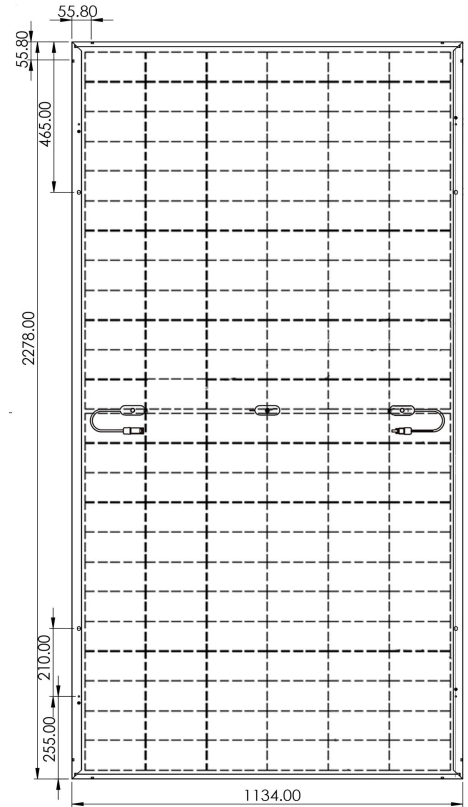
# Module per Pallet	35
# Pallet per 45'hc Container	22
# Pallet per 40'hc Container	20
# PCs per Container 40'hc	700
Pallet Weight (kg)	1145

### Caution:

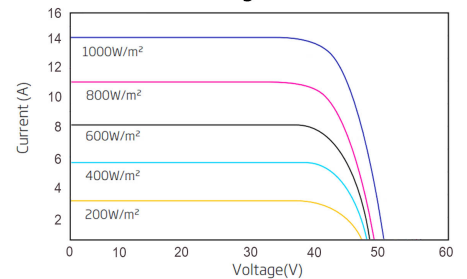
To operate, install and manage MEPSOLAR's modules, read the installation manual and use carefully.

### Observations:

This Datasheet is subject to change without notice due to continuous improvement of our products. You can find all records of the updates on our website [www.manaenergypak.com](http://www.manaenergypak.com) or by contacting one of our sales staff. All rights reserved ©Mana Energy Pak



### Current-Voltage Curve 560W



### Power-Voltage Curve 560W

