

# MEP600-T144-GG

## N-Type TOPCon-144cell-M10 Dual Glass

0~+5W

Positive Power Tolerance

23.2%

Maximum Efficiency

575-600W

### 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

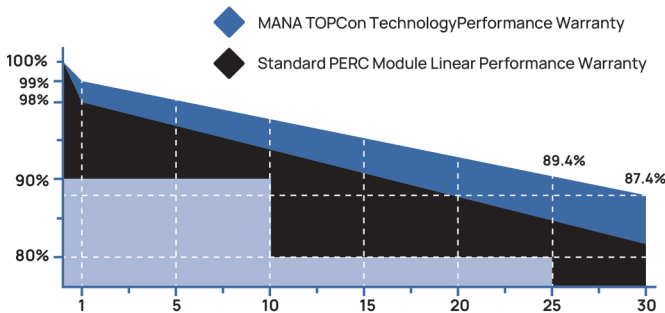
Higher power output even under low-light environment like on cloudy or foggy days

### 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 area



### Mana Energy's Certificates

TUV Certificate IEC 61215: 2021  
 TUV Certificate IEC 61730: 2016  
 TUV Certificate IEC 61730: 2023  
 CE Certification (EN 61730:2018)  
 UKCA Certification (EN 61730:2018)  
 CEBEC Certification (IEC 61215: 2021 / IEC 61730: 2023)  
 ISO 9001:2015: Quality management system  
 ISO 14001:2015: Environmental management system  
 ISO 45001:2018: Occupational health and safety management system



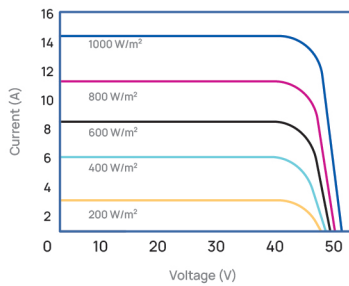
30 YEARS

Performance Warranty

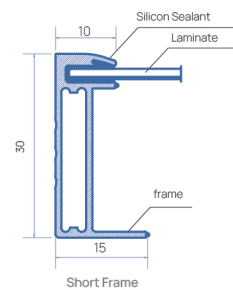
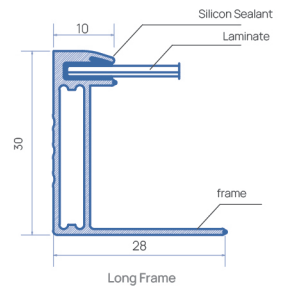
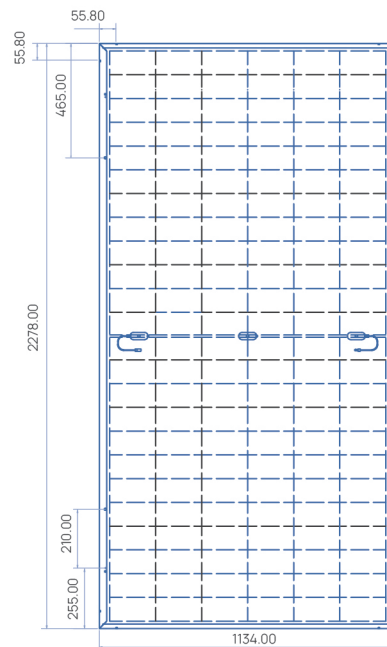
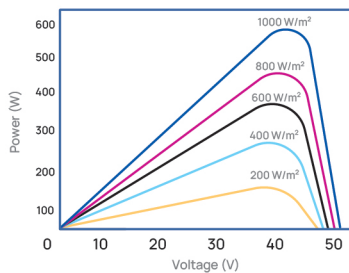
12 YEARS

Product Warranty

### Current-Voltage Curve 600W



### Power-Voltage Curve 600W



### Caution

To operate, install and manage Mana Energy Modules, read the installation manual and use carefully.

### Observation

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. Allrights reserved @Mana Energy.



# MEP600-T144-GG

Electrical Specificatuin (STC) - Front Side			STC: AM1.5 1000W/m <sup>2</sup> 25°C [Test Uncertainty: ±3%]					
Model			MEP 600-T144-GG 575	MEP 600-T144-GG 580	MEP 600-T144-GG 585	MEP 600-T144-GG 590	MEP 600-T144-GG 595	MEP 600-T144-GG 600
Max Power	Pmp	[W]	575	580	585	590	595	600
Max Power Voltage	Vmp	[V]	43.45	43.59	43.73	43.87	44.01	44.16
Max Power Current	Imp	[A]	13.24	13.31	13.38	13.45	13.52	13.60
Open Circuit Voltage	Voc	[V]	51.27	51.47	51.67	51.87	52.07	52.27
Short Circuit Current	Isc	[A]	14.31	14.37	14.43	14.49	14.55	14.61
Efficiency		[%]	22.26	22.45	22.65	22.84	23.03	23.23

Electrical Specificatuin (NMOT) - Front Side			NMOT: 800W/m <sup>2</sup> 20°C 1m/s [Test Uncertainty: ±3%]					
Max Power	Pmp	[W]	435	439	443	446	450	454
Max Power Voltage	Vmp	[V]	40.61	40.74	40.87	41.00	41.13	41.26
Max Power Current	Imp	[A]	10.71	10.77	10.83	10.89	10.95	11.01
Open Circuit Voltage	Voc	[V]	48.70	48.89	49.08	49.27	49.46	49.65
Short Circuit Current	Isc	[A]	11.55	11.61	11.67	11.73	11.79	11.85

Bifaciality Power Generation Gain (Regarding 575W as an example)								
Power Gain		[%]	0	5	10	15	20	25
Max Power	Pmp	[W]	575	604	633	661	690	719
Max Power Voltage	Vmp	[V]	43.45	43.51	43.57	43.63	43.69	43.75
Max Power Current	Imp	[A]	13.24	13.88	14.52	15.16	15.79	16.43
Open Circuit Voltage	Voc	[V]	51.27	51.31	51.35	51.39	51.43	51.47
Short Circuit Current	Isc	[A]	14.31	14.96	15.61	16.26	16.91	17.56

Mechanical Data	
Solar Cell	N-Type 182mm × 91mm - [12 × 12]
Module Dimension	2278×1134×30 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	Isc	α	[%/°C]	+0.046
Temperature Coefficient	Voc	β	[%/°C]	-0.25
Temperature Coefficient	Pmax	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
BifacialityTolerance	±5%
Bifaciality=Pmaxrear/Pmaxfront (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