



# TP-700-GB 675-700W

N-Type TOPCon-132cell-G12 Monofacial  
Maximum Efficiency **22.5%**  
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

### 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

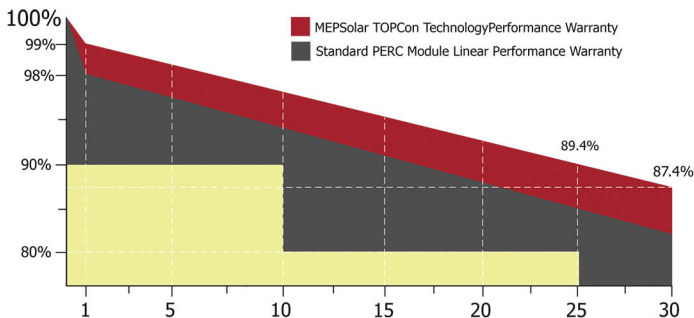


## Product & System Certificates

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-700-GB 675	TP-700-GB 680	TP-700-GB 685	TP-700-GB 690	TP-700-GB 695	TP-700-GB 700
Max Power P <sub>mp</sub> [W]	675	680	685	690	695	700
Max Power Voltage V <sub>mp</sub> [V]	38.6	38.8	39.0	39.2	39.4	39.5
Max Power Current I <sub>mp</sub> [A]	17.50	17.54	17.58	17.62	17.66	17.73
Open Circuit Voltage V <sub>oc</sub> [V]	46.2	46.4	46.6	46.8	47.0	47.1
Short Circuit Current I <sub>sc</sub> [A]	18.57	18.62	18.67	18.72	18.79	18.82
Efficiency [%]	21.7	21.9	22.0	22.2	22.3	22.5

\*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-700-GB 675	TP-700-GB 680	TP-700-GB 685	TP-700-GB 690	TP-700-GB 695	TP-700-GB 700
Max Power P <sub>mp</sub> [W]	510	514	518	521	525	528
Max Power Voltage V <sub>mp</sub> [V]	36.2	36.4	36.6	36.7	36.9	37.0
Max Power Current I <sub>mp</sub> [A]	14.11	14.14	14.17	14.21	14.24	14.29
Open Circuit Voltage V <sub>oc</sub> [V]	44.2	44.3	44.5	44.7	44.9	45.0
Short Circuit Current I <sub>sc</sub> [A]	15.01	15.05	15.09	15.13	15.15	15.17

### Mechanical Data

Solar Cell	N-Type 210mm x 105mm - [12x11]
Module Dimension	2384x1302x30 mm
Weight	33kg
Front Cover	Glass - 3.2mm Tempered AR Coated
Back Cover	White Backsheet
Frame	Silver - Anodized Aluminium Alloy
Junction Box	IP68 Rated - 3 Bypass Diodes
Cable	4.0m <sup>2</sup> - 300mm

### Temperature Ratings

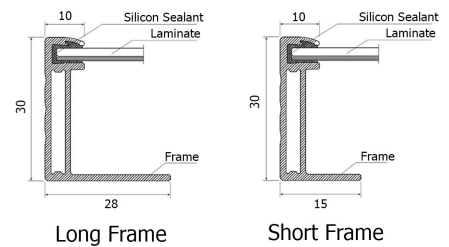
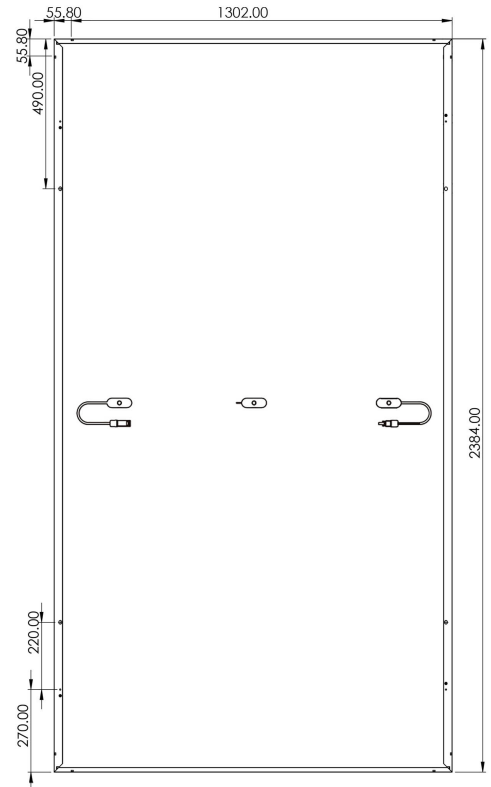
Temperature Coefficient	I <sub>sc</sub>	α	[%/°C]	+0.046
Temperature Coefficient	V <sub>oc</sub>	β	[%/°C]	-0.25
Temperature Coefficient	P <sub>max</sub>	γ	[%/°C]	-0.30
Nominal Module Operating Temperature	NMOT		[°C]	43 ± 2

### Operating Properties

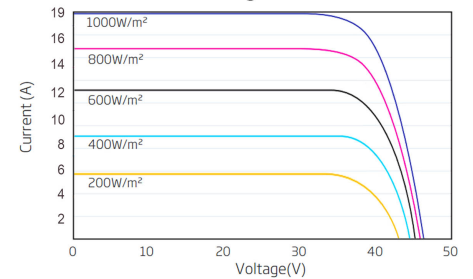
Max System Voltage	1500V
Max System Fuse Rating	30 A
Operational Temperature	-40 to 85 °C
Power Tolerance	+5W

### Packaging Information

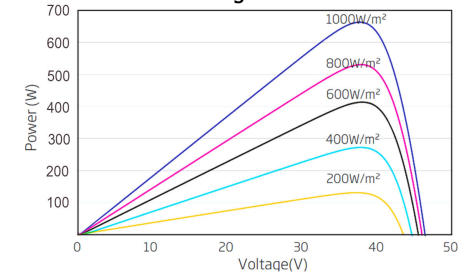
# Module per Pallet	35
# Pallet per 45'HC Container	12
# Pallet per 40'HC Container	10
# PCs per Container 40'HC	350
Pallet Weight (kg)	1160



### Current-Voltage Curve 695W



### Power-Voltage Curve 695W



### 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