

## *N-Type*

### HJT Bifacial Module Half-cell Double Glass Module

## TMX 700 MH9GAHT-132A

### 685 - 700 Wp

#### 132 HALF-CUT HJT

TRIMAX Solar HALF-CUT HJT modules are extremely powerful and guarantee maximum reliability for high and long-term yields. Bifacial technology enables additional energy generation from the rear (up to 30%). 30 years lifespan enables 10-30% additional power generation compared to conventional P-type modules.

#### HIGHLY EFFICIENT DESIGN

TRIMAX Solar HALF-CUT HJT modules are designed to maximize module efficiency. The low-loss, original Stäubli MC4-Evo2 connectors ensure maximum performance.

#### COMPREHENSIVELY TESTED AND CERTIFIED

TRIMAX Solar produces high-quality and reliable photo-voltaic modules according to international standards (ISO 9001: 2015, ISO 14001: 2015, ISO 45001: 2018).

TRIMAX Solar HALF-CUT HJT modules are certified to IEC 61215 and IEC 61730 and have also undergone salt spray and ammonia corrosion testing. The 100% PID-free solar cells reliably provide stable yields throughout the warranty period and beyond.

30 YEARS  
88% linear  
performance  
guarantee

15 YEARS  
product  
guarantee

0 - 5 WP  
positive  
tolerance



# TMX 700 MH9GAHT-132A

## ELECTRICAL DATA AT STC

Rated power Pmax (Wp)	685	690	695	700
Rated voltage Pmax – Vmp (V)	42,08	42,23	42,38	42,53
Rated current Pmax – Imp (A)	16,28	16,34	16,40	16,46
Open circuit voltage – Voc (V)	49,36	49,52	49,68	49,83
Short circuit current – Isc (A)	17,15	17,21	17,27	17,33
Module efficiency (%)	22,05	22,21	22,37	22,53
Sorting (plus tolerance)	0 ~ +5 Wp			

STC (Standard Test Conditions) : Irradiance 1000 W/m<sup>2</sup>, Air Mass = 1.5, Cell Temperature 25°C, Measurement Tolerance Pmax ± 3%, Voc ± 3%, Isc ± 4%

## ELECTRICAL DATA AT NOCT

Power at Pmax (Wp)	578	582	587	592
Voltage at Pmax – Vmp (V)	40,50	40,61	40,79	40,97
Current at Pmax – Imp (A)	14,27	14,33	14,39	14,45
Open circuit voltage – Voc (V)	47,43	47,59	47,75	47,91
Short circuit current – Isc (A)	15,11	15,17	15,23	15,29

NOCT (normal operating cell temperature) : Irradiation 800W/m<sup>2</sup>, Air Mass = 1.5, Wind Speed 1m/s, Ambient Temperature 20°C

## With Different Power Generation Gain (regarding 690W as an example)

Power Gain (%)	Power Output (Wp)	Voltage Mpp-Vmpp (V)	Current Mpp-Imp (A)	Voltage Open Circuit-Voc (V)	Short Circuit Current-Isc (A)
10	759	42,23	17,97	49,52	18,93
15	794	42,23	18,79	49,52	19,79
20	828	42,23	19,61	49,52	20,65
25	863	42,23	20,42	49,52	21,51
30	897	42,23	21,24	49,52	22,37

## SPECIFICATIONS

Cells	210 mm HALF-CUT HJT
Number of cells	132 (6x22)
Dimensions	2384 x 1303 x 35 mm
Weight	38 kg
Glass	2,0 mm, heat strengthened glass(Front/Back)
Frame	Anodized Aluminium alloy, silver
Junction-box	IP68, 3 Bypass diodes
Cable	UV-resistant   4,0 mm <sup>2</sup>   1200 mm
Connector	Stäubli MC4-Evo2 <sup>1</sup>
Bifaciality	88±5%

## TEMPERATURE COEFFICIENT

Temperature coefficient Pmax	-0,26 %/K
Temperature coefficient Voc	-0,24 %/K
Temperature coefficient Isc	+0,033 %/K
NMOT	43 ±2°C

## LIMITING VALUES

Operating temperature (°C)	-40 ~ +85
Maximum system voltage (V)	1500
Max Series Fuse Rating (A)	35
Safety class	Class II
Maximum load capacity (Pa)	Snow 5400 / Wind 2400

## PACKAGING

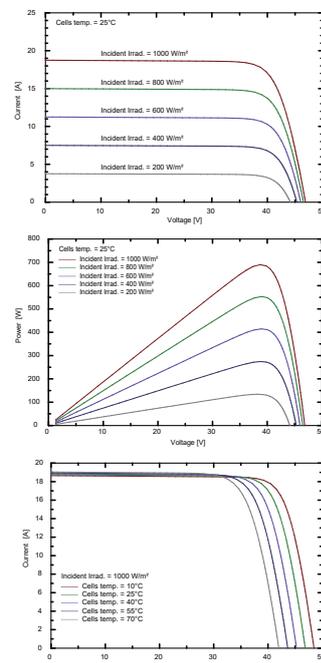
Container	40' HC
Modules per pallet	31
Modules per Container	558

Technical data are average values and may vary slightly. The associated data of the individual measurement are decisive. Possible light-induced degradation of the power after commissioning is not taken into account. Technical data is subject to change without notice. The current data sheets are available online at [www.trimax-solar.com](http://www.trimax-solar.com). All specifications in this data sheet comply with DIN EN 50380. Further information can be found in the installation manual. WEEE

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<sup>1</sup> or comparable

## ELECTRICAL CHARACTERISTICS (690W)



## TECHNICAL DRAWING

