

N-Type

10,000Pa

Maximum Snow Load Capacity

ToPCon

Bifacial Module

Half-cell Double Glass



TMX 430 MH8GANT-108B-10k

FULL BLACK

415 - 430 Wp

108 HALF-CUT TOPCon

TRIMAX Solar HALF-CUT TOPCon 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 TOPCon modules are designed to maximize module efficiency. The low-loss, original Stäubli MC4-Evo2 connectors ensure maximum performance. Maximum Snow Load Capacity of 10000 Pa.

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 TOPCon 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
87.4% linear
performance
guarantee

15 YEARS
product
guarantee

0 - 5 WP
positive
tolerance

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TMX 430 MH8GANT-108B-10k

ELECTRICAL DATA AT STC

Rated power Pmax (Wp)	415	420	425	430
Rated voltage Pmax – Vmp (V)	31,44	31,63	31,81	31,99
Rated current Pmax – Imp (A)	13,20	13,28	13,36	13,44
Open circuit voltage – Voc (V)	37,83	38,02	38,21	38,40
Short circuit current – Isc (A)	13,97	14,05	14,13	14,21
Module efficiency (%)	21,25	21,51	21,76	22,02
Sorting (plus tolerance)	0 ~ +5 Wp			

STC (Standard Test Conditions) : Irradiance 1000 W/m², Air Mass = 1.5, Cell Temperature 25°C, Measurement Tolerance Pmax ± 3%, Voc ± 3%, Isc ± 4 %

ELECTRICAL DATA AT NOCT

Power at Pmax (Wp)	314	318	322	326
Voltage at Pmax – Vmp (V)	29,57	29,75	29,93	30,07
Current at Pmax – Imp (A)	10,62	10,69	10,76	10,84
Open circuit voltage – Voc (V)	35,97	36,16	36,35	36,54
Short circuit current – Isc (A)	11,24	11,31	11,37	11,43

NOCT (normal operating cell temperature) : Irradiation 800W/m², Air Mass = 1.5, Wind Speed 1m/s, Ambient Temperature 20°C

With Different Power Generation Gain (regarding 425W 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	468	31,81	14,70	38,21	15,54
15	489	31,81	15,36	38,21	16,25
20	510	31,81	16,03	38,21	16,96
25	531	31,81	16,70	38,21	17,66
30	553	31,81	17,37	38,21	18,37

SPECIFICATIONS

Cells	182 mm HALF-CUT TOPCon
Number of cells	108 (6x18)
Dimensions	1722 x 1134 x 35 mm
Weight	25 kg
Glass	2,0 mm, heat strengthened glass (Front/Back)
Frame	Anodized Aluminium alloy, black
Junction-box	IP68, 3 Bypass diodes
Cable	UV-resistant 4,0 mm ² 1200 mm
Connector	Stäubli MC4-Evo2 ¹
Bifaciality	70±5%

TEMPERATURE COEFFICIENT

Temperature coefficient Pmax	-0,310 %/K
Temperature coefficient Voc	-0,26 %/K
Temperature coefficient Isc	+0,046 %/K
NMOT	42 ±2°C

LIMITING VALUES

Operating temperature (°C)	-40 ~ +85
Maximum system voltage (V)	1500
Max Series Fuse Rating (A)	30
Safety class	Class II
Maximum load capacity (Pa)	Snow 10.000 / Wind 2400

PACKAGING

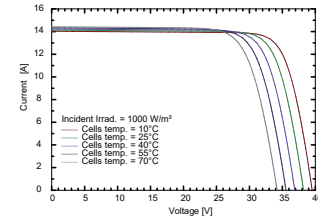
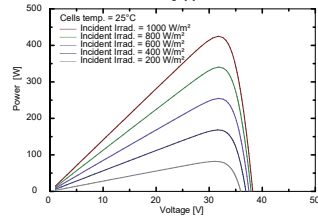
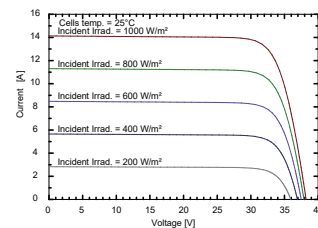
Container	40' HC
Modules per pallet	31
Modules per Container	806

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. 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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¹ or comparable

ELECTRICAL CHARACTERISTICS (425W)



TECHNICAL DRAWING

