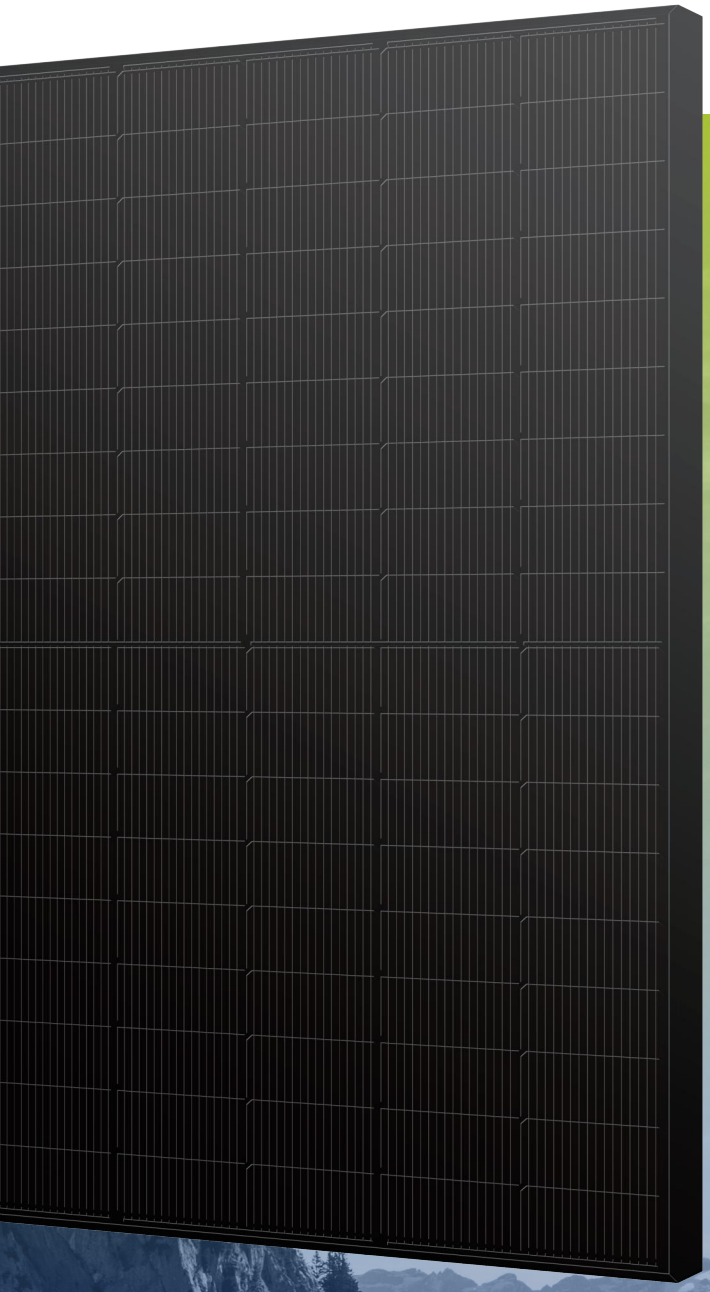
TRIMAX solar

N-Type



ToPCon Bifacial Module
Half-cell Double Glass Module

TMX 435 MH8GANT–108B

FULL BLACK

415 - 435 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.

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 : 2018). TRIMAX Solar HALF-CUT PERC modules are certified to IEC 61730 and IEC 61215 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

30 YEARS
product guarantee

0 - 5 WP
positive tolerance

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TMX 435 MH8GANT–108B

ELECTRICAL DATA AT STC

Rated power Pmax (Wp)	415	420	425	430	435
Rated volage Pmax – Vmp (V)	31,44	31,63	31,81	31,99	32,17
Rated current Pmax – Imp (A)	13,20	13,28	13,36	13,44	13,52
Open circuit voltage – Voc (V)	37,83	38,02	38,21	38,40	38,59
Short circuit current – Isc (A)	13,97	14,05	14,13	14,21	14,29
Module efficiency (%)	21,25	21,51	21,76	22,02	22,28
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 ± 2%, Isc ± 2%

ELECTRICAL DATA AT NOCT

Power at Pmax (Wp)	314	318	322	326	329
Voltage at Pmax – Vmp (V)	29,57	29,75	29,93	30,07	30,16
Current at Pmax – Imp (A)	10,62	10,69	10,76	10,84	10,91
Open voltage current – Voc (V)	35,97	36,16	36,35	36,54	36,73
Short circut current – Isc (A)	11,24	11,31	11,37	11,43	11,49

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 520W as an example)

Power Gain (%)	Power Output (Wp)	Voltage Mpp-Vmpp (V)	Current Mpp-Impp (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 30 mm
Weight	25 kg
Glass	2,0 mm, AR tempered glass(Front-Back)
Frame	Aluminum, black
Junction-box	IP68, 3 Bypass diodes
Cable	UV-resistant | 4,0 mm² | 1200 mm
Connerctor	Stäubli MC4-Evo2 [1]
Application class	A
Bifaciality	80±5%

TEMPERATURE COEFFICIENT

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

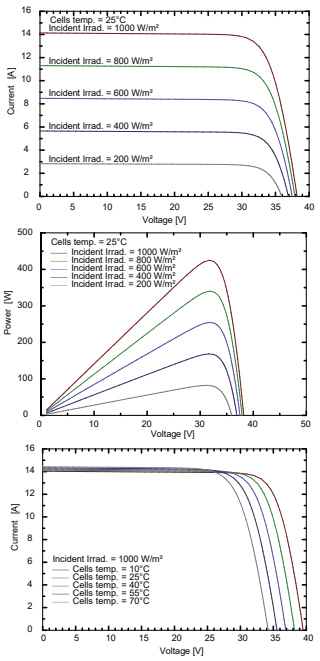
LIMITING VALUES

Operating temperature (°C)	-40 ~ +85
Maximum system voltage (V)	1500
Max Series Fuse Rating (A)	30
Safty class	Klasse II
Maximum load capacity (Pa)	Schnee 5400 / Wind 2400

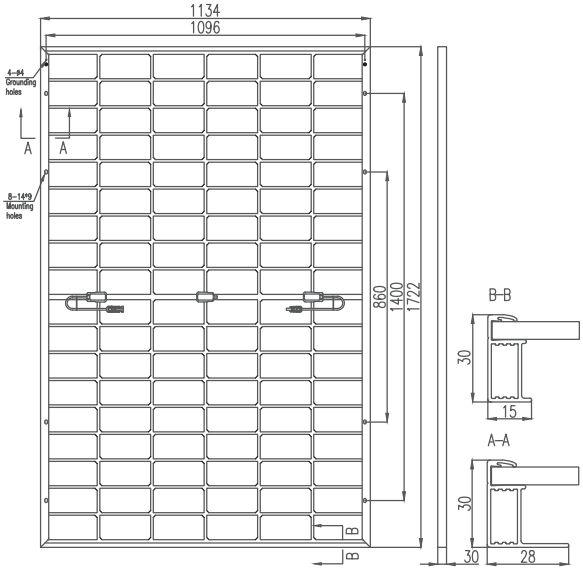
PACKAGING

Container	40' HC
Modules per pallet	36
Modules per Container	936

ELECTRICAL CHARACTERISICS (425W)



TECHNICAL DRAWING



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 Reg-No.: DE65803239 | © TRIMAX Solar 09/22 Version 2.4

[1] or compareable

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