

N-Type/TOPCon Bifacial Double Glass Module Full Black/Super Light

TMX 440 MH8GANT-108B

FULL BLACK

430 - 440 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. The use of 1.6mm + 1.6mm glass ensures improved Performance and lifespan.

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 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
performance
guarantee

30 YEARS
product
guarantee

0 - 5 WP
positive
tolerance

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ELECTRICAL DATA AT STC

Rated power Pmax (Wp)	430	435	440
Rated voltage Pmax – Vmp (V)	31,99	32,17	32,35
Rated current Pmax – Imp (A)	13,44	13,52	13,60
Open circuit voltage – Voc (V)	38,40	38,59	38,78
Short circuit current – Isc (A)	14,21	14,29	14,37
Module efficiency (%)	22,02	22,28	22,53
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)	326	329	333
Voltage at Pmax – Vmp (V)	30,07	30,16	30,33
Current at Pmax – Imp (A)	10,84	10,91	10,98
Open voltage current – Voc (V)	36,54	36,73	36,92
Short circuit current – Isc (A)	11,43	11,49	11,55

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 440W 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	484	32,35	14,96	38,78	15,81
15	506	32,35	15,64	38,78	16,53
20	528	32,35	16,32	38,78	17,24
25	550	32,35	17,00	38,78	17,96
30	572	32,35	17,68	38,78	18,68

SPECIFICATIONS

Cells	182 mm HALF-CUT TOPCon
Number of cells	108 (6x18)
Dimensions	1762 x 1134 x 30 mm
Weight	21.5 kg
Glass	1,6 mm, AR tempered glass(Front-Back)
Frame	Aluminum, black
Junction-box	IP68, 3 Bypass diodes
Cable	UV-resistant 4,0 mm ² 1200 mm
Connerctor	Stäubli MC4-Evo2 ¹
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	Class II
Maximum load capacity (Pa)	Snow 5400 / Wind 2400

PACKAGING

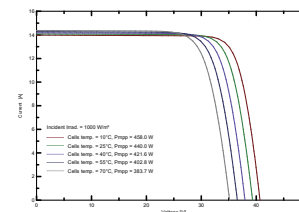
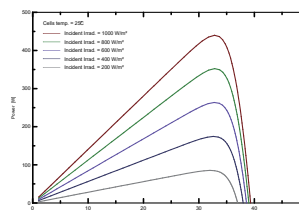
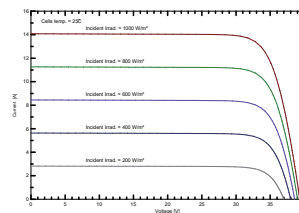
Container	40' HC
Modules per pallet	36
Modules per Container	936

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 (440W)



TECHNICAL DRAWING

