

PHOTOVOLTAIC MODULE TMX 460 MH7-144A

440 - 460 Wp

144 HALF-CUT PERC

TRIMAX Solar HALF-CUT PERC modules are extremely efficient and guarantee maximum reliability for high and long-term yields.

HIGHLY EFFICIENT DESIGN

TRIMAX Solar HALF-CUT PERC 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 photovoltaic 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.

25 YEARS
85% linear
performance
guarantee

15 YEARS
product
guarantee

0 - 5 WP
positive
tolerance

TMX 460 MH7-144A

ELECTRICAL DATA AT STC

	TMX 440 MH7-144A	TMX 445 MH7-144A	TMX 450 MH7-144A	TMX 455 MH7-144A	TMX 460 MH7-144A
Rated power Pmax (Wp)	440	445	450	455	460
Rated voltage Pmax – Vmp (V)	41,08	41,28	41,47	41,70	41,89
Rated current Pmax – Imp (A)	10,71	10,78	10,85	10,91	10,98
Open circuit voltage – Voc (V)	49,05	49,28	49,51	49,75	49,87
Short circuit current – Isc (A)	11,64	11,71	11,78	11,84	11,91
Module efficiency (%)	20,2	20,5	20,7	20,9	21,2
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)	338,02	341,86	345,71	349,55	353,39
Voltage at Pmax – Vmp (V)	37,45	37,63	37,80	38,01	38,18
Current at Pmax – Imp (A)	9,03	9,09	9,14	9,20	9,26
Open voltage current – Voc (V)	45,29	45,50	45,71	45,93	46,04
Short circuit current – Isc (A)	9,90	9,96	10,02	10,07	10,13

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

SPECIFICATIONS

Cells	166 mm HALF-CUT PERC
Number of cells	144 (6x24)
Dimensions	2094 x 1038 x 35 mm
Weight	24,0 kg
Glass	3,2 mm, AR tempered glass
Frame	aluminum, silver or black
Junction-box	IP68, 3 Bypass diodes
Cable	UV-resistant 4,0 mm ² 1200 mm
Conconnector	Stäubli MC4-Evo2
Application class	A

TEMPERATURE COEFFICIENT

Temperature coefficient Pmax	-0,354 %/°C
Temperature coefficient Voc	-0,266 %/°C
Temperature coefficient Isc	+0,046 %/°C
NMOT	45 ±2°C

LIMITING VALUES

Operating temperature (°C)	-40 ~ +85
Maximum system voltage (V)	1500
Max Series Fuse Rating (A)	20
Safety class	class II
Maximum load capacity (Pa)	snow 5400 / wind 2400

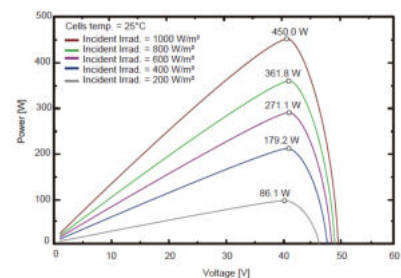
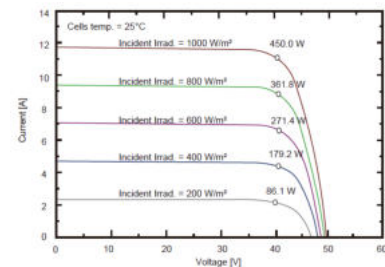
PACKAGING

Container	40' HC
Modules per pallet	31
Modules per container	682

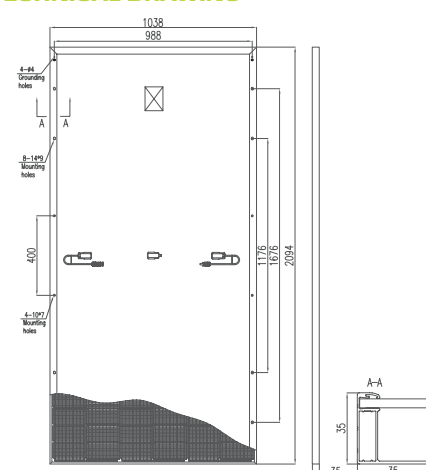
Technical data are average values and may vary slightly. The associated data of the individual measurement are decisive. Possible light-induced degradation of the power after commissioning is not taken into account. Technical data is subject to change without notice. The current data sheets are available 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.

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ELECTRICAL CHARACTERISTICS (450W)



TECHNICAL DRAWING



*400mm mounting holes are only suitable for 6005-T6 aluminum frame