



PHOTOVOLTAIC MODULE TMX 550 MH8-144T

BIFACIAL - TRANSPARENT BACKSHEET

530 - 550 Wp

144 HALF-CUT PERC

TRIMAX Solar HALF-CUT PERC modules are extremely efficient and guarantee maximum reliability for high and long-term yields. The transparent back sheet allows up to 30% additional power gain from the back side.

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 550 MH8-144T

ELECTRICAL DATA AT STC

	TMX 530 MH8-144T	TMX 535 MH8-144T	TMX 540 MH8-144T	TMX 545 MH8-144T	TMX 550 MH8-144T
Rated power P _{max} (Wp)	530	535	540	545	550
Rated voltage P _{max} – V _{mp} (V)	41,28	41,51	41,70	41,92	42,11
Rated current P _{max} – I _{mp} (A)	12,84	12,89	12,95	13,00	13,06
Open circuit voltage – V _{oc} (V)	49,61	49,87	49,95	50,04	50,28
Short circuit current – I _{sc} (A)	13,66	13,72	13,78	13,84	13,9
Module efficiency (%)	20,5	20,7	20,9	21,1	21,3
Sorting (plus tolerance)	0 ~ +5 Wp				

STC (Standard Test Conditions) : Irradiance 1000 W/m², Air Mass = 1.5, Cell Temperature 25°C, Measurement Tolerance P_{max} ± 3%, V_{oc} ± 2%, I_{sc} ± 2%

ELECTRICAL DATA AT NOCT

Power at P _{max} (Wp)	407,16	411,01	414,85	418,69	422,53
Voltage at P _{max} – V _{mp} (V)	37,62	37,83	38,01	38,21	38,39
Current at P _{max} – I _{mp} (A)	10,82	10,86	10,91	10,96	11,01
Open voltage current – V _{oc} (V)	45,80	46,04	46,12	46,20	46,42
Short circuit current – I _{sc} (A)	11,61	11,66	11,72	11,77	11,82

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

ELECTRICAL CHARACTERISTICS WITH 10% REAR SIDE POWER GAIN

Power output	583	589	594	600	605
Voltage at P _{max} – V _{mp} (V)	41,28	41,51	41,70	41,92	42,11
Current at P _{max} – I _{mp} (A)	14,12	14,18	14,25	14,30	14,37
Open voltage current – V _{oc} (V)	49,61	49,87	49,95	50,04	50,28
Short circuit current – I _{sc} (A)	15,03	15,09	15,16	15,22	15,29

Rear side power gain: The additional gain from the rear side compared to the power of the front side at standard test conditions. It depends on mounting (structure, height, tilt angle etc.) and albedo of the ground. Power bifaciality 65±5%.

SPECIFICATIONS

Cells	182 mm HALF-CUT PERC
Number of cells	144 (6x24)
Dimensions	2279 x 1134 x 35 mm
Weight	27,0 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
Connerctor	Stäubli MC4-Evo2 ¹
Application class	A

TEMPERATURE COEFFICIENT

Temperature coefficient P _{max}	-0,353 %/K
Temperature coefficient V _{oc}	-0,272 %/K
Temperature coefficient I _{sc}	+0,026 %/K
NMOT	45 ±2°C

LIMITING VALUES

Operating temperature (°C)	-40 ~ +85
Maximum system voltage (V)	1500
Max Series Fuse Rating (A)	25
Safety class	class II
Maximum load capacity (Pa)	snow 5400 / wind 2400

PACKAGING

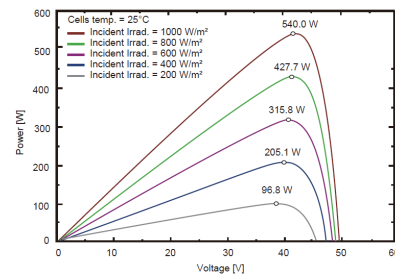
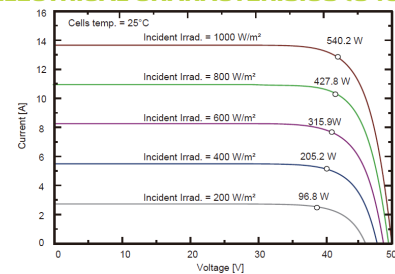
Container	40' HC
Modules per pallet	31
Modules per container	620

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

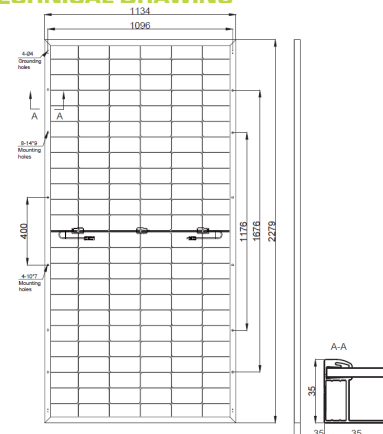
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¹ or comparable

ELECTRICAL CHARACTERISTICS (540W)



TECHNICAL DRAWING



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

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