

PERC**MAX**

# BIFACIAL

HIGH PERFORMANCE  
BIFACIAL MONOCRYSTALLINE  
P.E.R.C MODULE

108

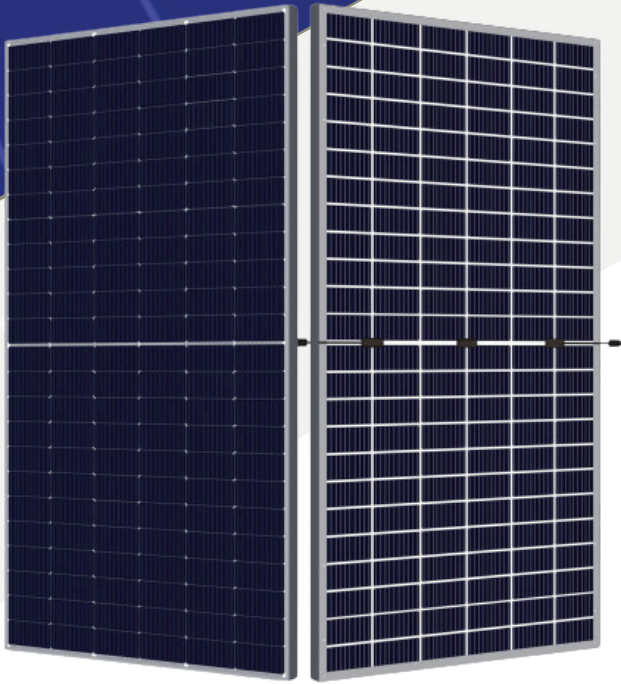
## TM - 390/410M-108BI

**108 CELL**  
Mono PERC Module

**390 - 410Wp**  
Power Output Range

**1500VDC**  
Maximum System Voltage

**20.97%**  
Maximum Efficiency



### KEY SALIENT FEATURES



Industry leading lowest thermal co-efficient of power



Industry leading 15 years product warranty



Excellent low irradiance performance



Excellent PID resistance



Positive power tolerance of 0~+3%



Fully automated production at all stages



Fully Reduced power loss by minimizing the effect of shadow shading ( 9 - 18 Busbar)



European Warranty & After - Sales Service



### TAMESOL BUILDING A GREEN FUTURE S.L

TAMESOL is a global provider of high-efficiency PV panels with a 10GW annual production capacity and a 100% automated production line, innovating state-of-the-art products for over 15 years. Our panels have been installed in more than 50 countries, with over 20 million panels already connected to the grid.

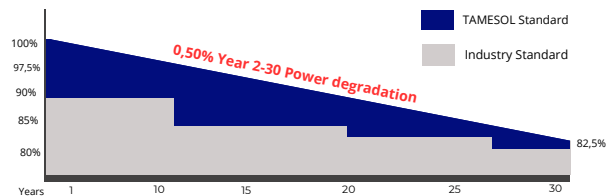
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**TAMESOL**  
Energia para vivir

### LINEAR PERFORMANCE WARRANTY

15 year Product Warranty / 30-Year Linear Power Warranty



*Since 2007, building a green future*

<b>20,97%</b> MAX MODULE EFFICIENCY	<b>0 - +3%</b> POWER TOLERANCE	<b>2,0%</b> FIRST YEAR POWER DEGRADATION	<b>0,50%</b> YEAR 2-30 POWER DEGRADATION	<b>PERC CELL</b> Lower operating temperature
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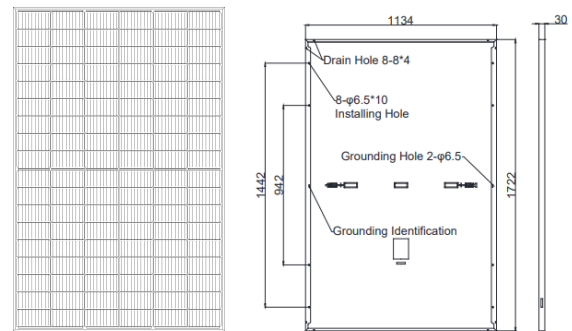
**ELECTRICAL CHARACTERISTICS** STC: AM1.5 1.000W/m2 NOTC: AM1.5 800W/m2 20° 1 m/s Test uncertainty for Pmax 0 - +3%

Module type	TM - 390M-108BI		TM - 395M-108BI		TM - 400M-108BI		TM - 405M-108BI		TM - 410M-108BI	
	STC	NOTC	STC	NOTC	STC	NOTC	STC	NOTC	STC	NOTC
Maximum Power (Pmax/w)	390	316	395	316	400	320	405	324	410	328
Open Circuit Voltage (Voc/V)	36,70	36,21	36,75	36,41	36,95	36,61	37,15	36,81	37,35	37,01
Short Circuit Current (Isc/A)	13,59	11,04	13,72	11,08	13,78	11,13	13,84	11,18	13,90	11,23
Voltage at Maximum Power (Vmp/V)	30,53	30,38	30,87	30,58	31,07	30,78	31,27	30,98	31,47	31,28
Current at maximum Power (Imp/A)	12,78	10,26	12,80	10,33	12,87	10,40	12,95	10,46	13,03	10,52
Module Efficiency (%)	19,95, %		20,20%		20,46%		20,71%		20,97%	

**MECHANICAL PARAMETERS**

Cell Orientation	single crystal PERC182x91mm (108 pieces)
Junction Box	IP68, three diodes
Output Cable	4.0mm <sup>2</sup> 300mm / 1000mm
Glass	3.2mm tempered coated glass, low iron
Frame	Anodized aluminum alloy frame
Weight	23 - 24,7 kg
Dimensión	1722*1134*30mm
Packaging	36/37 pcs*pallet / 936pcs*40HQ

**PHYSICAL CHARACTERISTICS**



**OPERATING PARAMETERS**

Operational Temperature	-40°C - +85°C
Power Output Tolerance	(0, +3%)
Maximum System Voltage	1500V DC
Maximum Series Fuse Rating	25 A
Nominal Operating Cell Temperature	45±2°C
Protection Glass	Class II
Fire Rating	Class C
Bifacial- Factor	70%±10%

**MECHANICAL LOADING**

Front Side Maximum Static Loading	5400 PA
Rear Side Maximum Static Loading	2400 PA

**TEMPERATURA RATINGS (STC)**

Temperature Coefficient of Isc	+0.05%/°C
Temperature Coefficient of Voc	-0.28%/°C
Temperature Coefficient of Pmax	-0.38%/°C

**PACKING MANNER**

Container	40ft(HQ)
Number of modules per container	936/962
Number of modules per pallet	36/37
Number of pallets per container	26

TAMESOL Authorized Solar Dealer

**Note:** The specifications are obtained under the Standard Test Conditions (STCs): 1000 W/m2 solar irradiance, 1.5 Air Mass, and cell temperature of 25°C. The NOCT is obtained under the Test Conditions: 800 W/m2, 20°C ambient temperature, 1m/s wind speed, AM 1.5 spectrum. Please contact [info@tamesol.com](mailto:info@tamesol.com) for technical support. The actual transactions will be subject to the contracts. This parameter is for reference only and it is not a part of the contracts. The specifications are subject to change without prior notice.