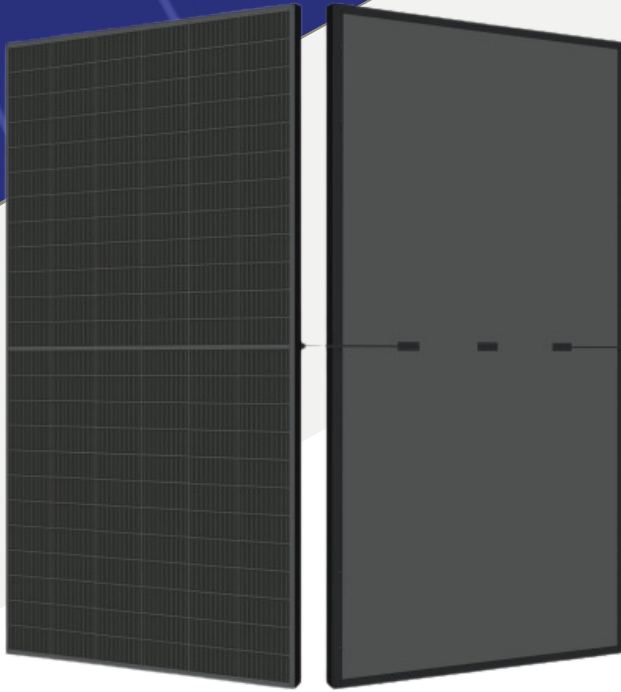


PERC**MAX**

ALL BLACK

HIGH PERFORMANCE
MONOCRYSTALLINE
P.E.R.C MODULE

108



TM - 400/420M-108AB

108 CELL
Mono PERC Module

400 - 420Wp
Power Output Range

1500VDC
Maximum System Voltage

21,70%
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

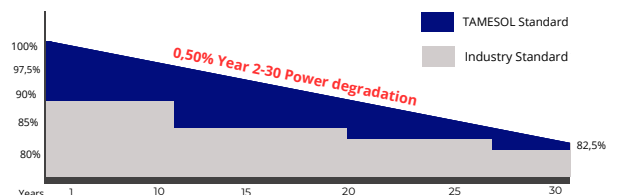
TAMESOL is a global provider of high-efficiency PV panels with a 10GW annual production capacity and a 100% automated production line, innovating state-of-the-art products for over 15 years. Our panels have been installed in more than 50 countries, with over 20 million panels already connected to the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

Tel : +34 872 222 388

E - mail: info@tamesol.com Website: www.tamesol.com

LINEAR PERFORMANCE WARRANTY

15 year Product Warranty / 30-Year Linear Power Warranty



TAMESOL 15
YEARS

Since 2007, building a green future

21,70% MAX MODULE EFFICIENCY	0 - +3% POWER TOLERANCE	2,0% FIRST YEAR POWER DEGRADATION	0,50% YEAR 2-30 POWER DEGRADATION	PERC CELL Lower operating temperature
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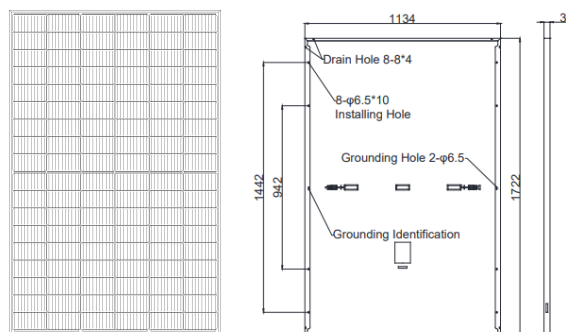
ELECTRICAL CHARACTERISTICS STC: AM1.5 1.000W/m2 NOTC: AM1.5 800W/m2 20° 1 m/s Test uncertainty for Pmax 0 - +3%

Module type	TM - 400M-108AB		TM - 405M-108AB		TM - 410M-108AB		TM - 415M-108AB		TM - 420M-108AB	
	STC	NOTC	STC	NOTC	STC	NOTC	STC	NOTC	STC	NOTC
Maximum Power (Pmax/w)	400	298.9	405	302.7	410	306.4	415	310.1	420	313.6
Open Circuit Voltage (Voc/V)	37.00	34.97	37.20	35.15	37.40	35.34	37.60	35.53	37.80	35.72
Short Circuit Current (Isc/A)	13.65	11.07	13.76	11.17	13.88	11.26	13,99	11.35	14.10	11.44
Voltage at Maximum Power (Vmp/V)	31.09	28.98	31.26	29.13	31.43	29.29	31.60	29.45	31,77	29.61
Current at maximum Power (Imp/A)	12.86	10.32	12,96	10,39	13.05	10,46	13,13	10,53	13,22	10,60
Module Efficiency (%)	20,50%		20,70%		21,00%		21,30%		21,70%	

MECHANICAL PARAMETERS

Cell Orientation	single crystal PERC182x91mm (108 pieces)
Junction Box	IP68, three diodes
Output Cable	4.0mm² 300mm / 1200mm
Glass	3.2mm tempered coated glass, low iron
Frame	Anodized aluminum alloy frame
Weight	20.8kg
Dimensión	1722*1134*30/35mm
Packaging	31/36 pcs*pallet / 806/936pcs*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

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	806/936
Number of modules per pallet	31/36
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 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.