



**Mo Series  
TOPCon Mono  
All Black Single Glass Module**

**420-440W 108**



**Product Features**



**Higher conversion efficiency**

M10 silicon oxynitride process and half cell multi-busbar technology are used to improve the optical utilization, and the conversion efficiency is up to 21.2%.



**Better power generation performance**

The series parallel design reduces the series resistance  $R_s$  and reduces internal electrical performance losses



**Excellent low light performance**

It can output more electricity under low light conditions such as hazy cloudy days, morning and evening.



**Visual total black**

All black design, more harmonious and beautiful application scenarios.

**Product System And Certification**

- ISO 9001
- ISO 14001
- ISO 45001
- IEC 61215
- IEC 61730



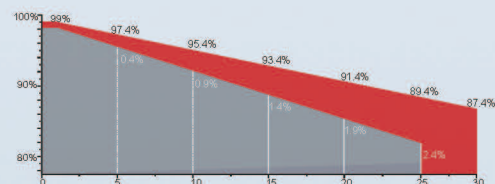
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**Leading Quality Standards**

**15** year  
Quality assurance

**30** year  
Power guarantee

**-0.40** %  
Annual decay



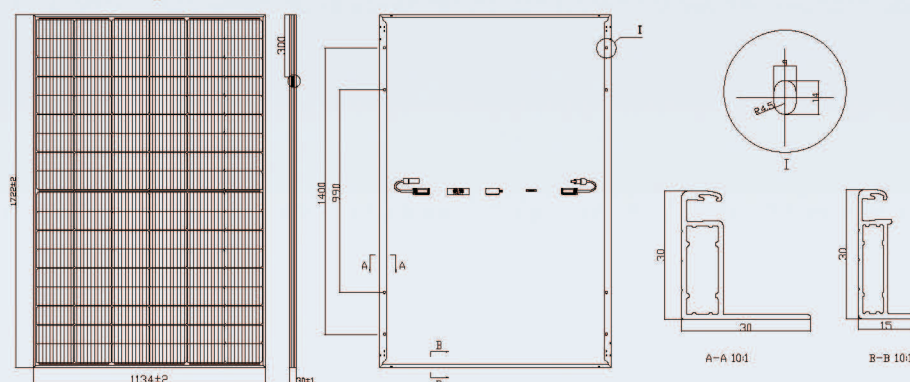
## Mechanical Parameters

Cell	N-type TOPCon (108)
Dimensions	1722±2mm×1134±2mm×30±1mm
Weight	21kg±3%
Glass	3.2mm AR coating tempered glass,low iron
Frame	Black anodized aluminium alloy
Junction box	IP68, 3 diodes
Wireway	4mm <sup>2</sup> , 350mm (+) /350mm (-) or customized length
Packaging	36 pieces/pallet
Loading quantity	20GP: 216 pieces , 40GP: 432 pieces , 40HQ: 936pieces, 13 meter truck: 936pieces, 17.5 meter truck: 1152pieces

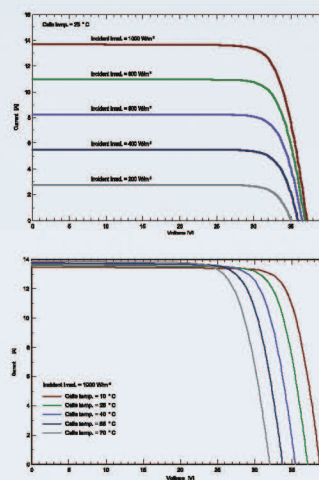
## Operation Parameters

Maxsystem voltage	1500V DC
Operating Temperature	-40°C ~+85°C
Fuse's rated current	25A
Maxload front	5400Pa
Maxload back	2400Pa
Normal Operating Cell Temperature	45±2°C
Safety level	Class II
Fire performance	UL Type I

## Drawing



## I-V Curve



## Electrical Parameters

Module	JKL108-B-420NH		JKL108-B-425NH		JKL108-B-430NH		JKL108-B-435NH		JKL108-B-440NH	
	STC	NOCT	STC	NOCT	STC	NOCT	STC	NOCT	STC	NOCT
Maximum power [W]	420	316	425	320	430	324	435	328	440	332
Maximum working voltage [V]	31.56	29.35	31.74	29.53	31.93	29.67	32.13	29.84	32.35	30.99
Maximum working current [A]	13.31	10.77	13.39	10.84	13.47	10.92	13.54	10.99	13.62	11.06
Open circuit voltage [V]	38.19	36.22	38.38	36.41	38.57	36.58	38.75	36.78	38.96	39.01
Short circuit current [A]	14.04	11.38	14.12	11.44	14.21	11.51	14.27	11.58	14.35	11.65
EFF [%]	21.52%		21.83%		22.02%		22.31%		22.53%	
Power tolerance [W]	0 ~+5W									
Short circuit current temperature coefficient	+0.046%/°C									
Open circuit voltage temperature coefficient	-0.250%/°C									
Maximum power temperature coefficient	-0.300%/°C									
STC	Irradiance 1000W/m <sup>2</sup> , Cell temperature 25° C, Spectral AM1.5									
NOCT	Irradiance 800W/m <sup>2</sup> , Ambient temperature 20° C , Spectrum AM1.5, Wind speed 1m/s									

Note: The electrical performance in this product catalog do not only refer to a single module, or are they promised in the contract. The electrical parameters are only used for comparison between different module types.