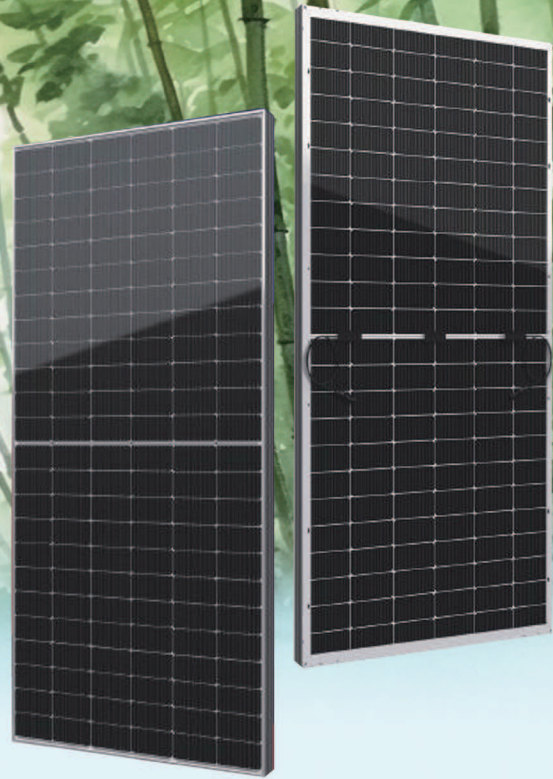




**Zhu Series  
TOPCon Mono  
Bifacial Glass Module**

**570-590W 144**



**Product Features**



**Low attenuation**

The first year attenuation is less than 1.0% with a linear attenuation of 0.4% per year for 30 years



**Double sided power generation**

The gain of double-sided power generation increases with the back light exposure, reaching up to 25% significantly reducing LCOE.



**High power**

Applying N-type multi-busbar half cut technology to improve energy density and bring higher output power.



**Better power generation performance**

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

**Product System And Certification**

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



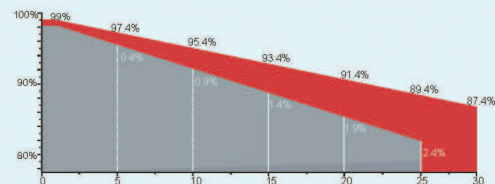
Add.: Changzhi, Shanxi, China  
Tel: +86 355 5916888  
Email: info@luansolar.com  
https://www.luansolar.com

**Leading Quality Standards**

**15** year  
Quality assurance

**30** year  
Power guarantee

**-0.40** %  
Annual decay



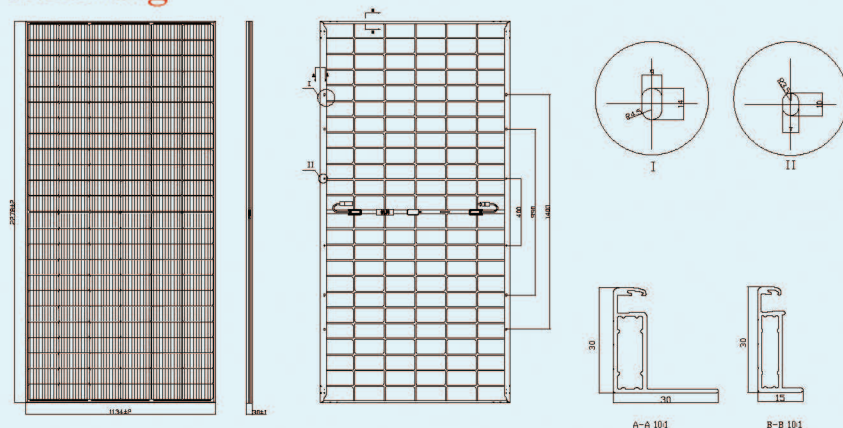
## Mechanical Parameters

Cell	N-type TOPCon (144)
Dimensions	2278±2mm×1134±2mm×30±1mm
Weight	32kg±3%
Glass	2.0mm AR coating heatstrengthened glass,low iron
Frame	Anodized aluminium alloy
Junction box	IP68,3 diodes
Wireway	4mm <sup>2</sup> , 350mm (+) /350mm (-) or customized length
Packaging	36pieces/pallet
Loading quantity	20GP: 180pieces, 40GP: 360pieces, 40HQ: 720pieces, 13 meter truck: 720pieces, 17.5 meter truck: 864pieces

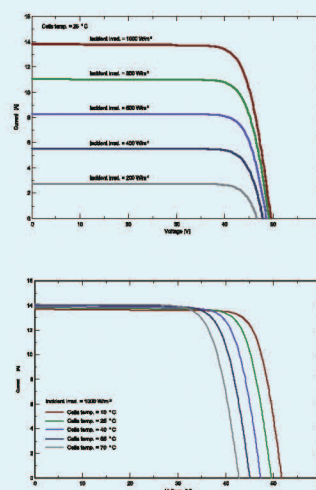
## Operation Parameters

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	JKL144-B-570NB			JKL144-B-575NB			JKL144-B-580NB			JKL144-B-585NB			JKL144-B-590NB		
	(FS) STC	(FS) NOCT	(RS) STC	(FS) STC	(FS) NOCT	(RS) STC	(FS) STC	(FS) NOCT	(RS) STC	(FS) STC	(FS) NOCT	(RS) STC	(FS) STC	(FS) NOCT	(RS) STC
Maximum power [W]	570	429	456	575	433	460	580	437	464	585	441	468	590	445	472
Maximum working voltage [V]	43.01	40.44	42.98	43.21	40.63	43.18	43.41	40.86	43.38	43.62	41.05	43.57	43.83	41.25	43.78
Maximum working current [A]	13.26	10.61	10.61	13.32	10.66	10.66	13.37	10.71	10.71	13.42	10.76	10.77	13.49	10.83	10.84
Open circuit voltage [V]	51.71	49.12	51.68	51.91	49.31	51.88	52.11	49.51	52.08	52.32	49.73	52.29	52.52	49.92	52.51
Short circuit current [A]	13.95	11.16	11.16	14.01	11.21	12.21	14.07	11.26	11.26	14.13	11.31	11.32	14.21	11.38	11.37
EFF [%]	22.07%			22.26%			22.45%			22.66%			22.85%		
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 speed1m/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.