

# Harvest the Sunshine

# JA SOLAR

# 460W



## JAM54S40 LR n-type Half-cell Module

### Premium Cells

n-  
Bycium+  
16BB

MBB Half-Cell  
Technology

# 26%



Cell Conversion  
Efficiency

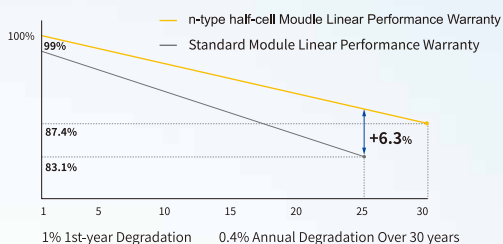
### Premium Modules

Higher power  
generation better LCOE

n-type with very  
Lower LID

Better Temperature  
Coefficient

Better low irradiance  
response



15-year product  
warranty

30-year linear power  
output warranty

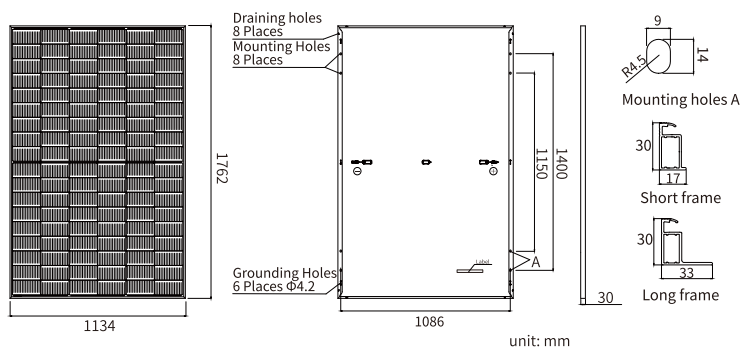
### Comprehensive Certificates

- IEC 61215, IEC 61730
- ISO 9001: 2015 Quality management systems
- ISO 14001: 2015 Environmental management systems
- ISO 45001: 2018 Occupational health and safety management systems
- IEC 62941: 2019 Terrestrial photovoltaic (PV) modules - Quality system for PV module manufacturing



## DEEP BLUE 4.0 Pro

# JAM54S40 LR n-type Half-cell Module



## MECHANICAL PARAMETERS

Cell	Mono
Weight	20kg
Dimensions	1762×1134mm×30mm
Cable Cross Section Size	4mm <sup>2</sup> (IEC), 12 AWG(UL)
No. of cells	108(6×18)
Junction Box	IP68, 3diodes
Connector	QC Solar QC4.10-351/QC4.10-35 Stäubli PV-KST4-EVO2A/xy ,PV-KBT4-EVO2A/xy
Cable Length (including Connector)	Portrait: 300mm(+)/400mm(-) Landscape: 1200mm(+)/1200mm(-)
Front Glass/Back Glass	2.8mm
Packaging Configuration	36pcs/Pallet, 936pcs/40HQ Container
Country of Manufacturer	China/Vietnam

Remark: customized frame color and cable length available upon request

## ELECTRICAL PARAMETERS AT STC

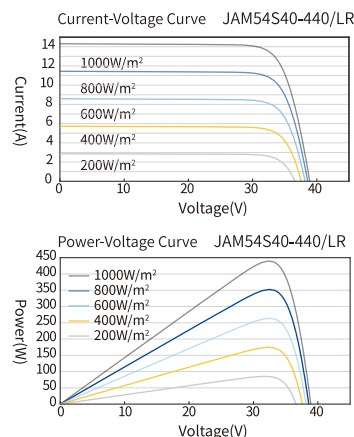
TYPE	JAM54S40 -435/LR	JAM54S40 -440/LR	JAM54S40 -445/LR	JAM54S40 -450/LR	JAM54S40 -455/LR	JAM54S40 -460/LR
Rated Maximum Power(Pmax) [W]	435	440	445	450	455	460
Open Circuit Voltage (Voc) [V]	38.70	38.90	39.10	39.30	39.50	39.70
Maximum Power Voltage(Vmp) [V]	32.29	32.47	32.65	32.82	33.00	33.17
Short Circuit Current(Isc) [A]	14.23	14.31	14.40	14.48	14.56	14.64
Maximum Power Current(Imp) [A]	13.47	13.55	13.63	13.71	13.79	13.87
Module Efficiency [%]	21.8	22.0	22.3	22.5	22.8	23.0
Power Tolerance	0~+3%					
Temperature Coefficient of Isc(α <sub>Isc</sub> )	+0.045%/°C					
Temperature Coefficient of Voc (β <sub>Voc</sub> )	-0.250%/°C					
Temperature Coefficient of Pmax(γ <sub>Pmp</sub> )	-0.290%/°C					
STC	Irradiance 1000W/m <sup>2</sup> , cell temperature 25°C, AM1.5G					

Remark: Electrical data in this catalog do not refer to a single module and they are not part of the offer. They only serve for comparison among different module types. Measurement tolerance at STC: Pmax ±3%, Voc ±3% and Isc ±5%.

## ELECTRICAL PARAMETERS AT NOCT

TYPE	JAM54S40 -435/LR	JAM54S40 -440/LR	JAM54S40 -445/LR	JAM54S40 -450/LR	JAM54S40 -455/LR	JAM54S40 -460/LR
Rated Max Power(Pmax) [W]	329	333	337	341	344	348
Open Circuit Voltage(Voc) [V]	36.62	36.81	37.00	37.19	37.37	37.57
Max Power Voltage(Vmp) [V]	30.56	30.73	30.89	31.06	31.22	31.38
Short Circuit Current(Isc) [A]	11.38	11.45	11.52	11.58	11.65	11.71
Max Power Current(Imp) [A]	10.78	10.84	10.90	10.97	11.03	11.10
NOCT	Irradiance 800W/m <sup>2</sup> , ambient temperature 20°C, wind speed 1m/s, AM1.5G					

## CHARACTERISTICS



## OPERATING CONDITIONS

Maximum System Voltage	1500V DC
Operating Temperature	-40°C~+85°C
Maximum Series Fuse Rating	25A
Maximum Static Load, Front	3600Pa, 1.5
Maximum Static Load, Back	1600Pa, 1.5
NOCT	45±2°C
Safety Class	Class II
Fire Safety Class	Class C