# Product Catalogue 2023



Building Your Trust in Solar

www.jinkosolar.com





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# **Leading Globalization Competence**

Jinko Solar Co., Ltd. (referred to as "JinkoSolar," stock code: 688223) is a globally renowned and highly innovative solar technology company. JinkoSolar's products serve over 180 countries and regions worldwide, catering to more than 3,000 customers. As of the forth quarter of 2023, the cumulative module shipments of the company have exceeded 200 GW.

JinkoSolar pioneered the "vertical integration" capacity from silicon wafer and cell to module production in the industry. It owns 14 globalized manufacturing bases in China, Malaysia, Vietnam, and the United States. By the end of 2023, the company's monocrystalline silicon wafer, cell and module production capacity will reach 85GW, 90GW and 110GW respectively, of which the N-type production capacity will account for more than 75%, and the N-type production capacity scale is leading the industry. With a workforce of over 2,000 research and development professionals, JinkoSolar has earned numerous accolades including "National Enterprise Technology Center," "National Technological Innovation Demonstration Enterprise," and "Manufacturing Single Champion Enterprise". The company has played a leading role in establishing multiple international and domestic industry standards such as IEC, continuously expanding the diversified application scenarios of photovoltaic technology. It actively develops building integration photovoltaic, photovoltaic hydrogen production, energy storage system, striving to create a clean energy ecosystem.

Jinko Solar was listed on the STAR Board of the Shanghai Stock Exchange in 2022, and JinkoSolar Holding Co., Ltd., its indirect controlling shareholder, was listed on the New York Stock Exchange in 2010.



# **R&D Key Figures**

JinkoSolar has invested significant assets in research and development to lead the industry by upgrading technology to provide efficient and competitive industry products to customers worldwide



# Long-term Bankability

JinkoSolar has been named one of the most bankable PV module brands by Bloomberg New Energy Finance for 9 consecutive years since 2012. JinkoSolar has been awarded AAA rating in the PV ModuleTech Financeability Rating Report.



# The 25th Time World Record Achieved by JinkoSolar

The efficiency of N-Type TOPCon monocrystalline cell reaches 32.33% Highest conversion efficiency of 24.76% for 182N-type TOPCon modules



Awarded the "Quality China" award by TUv Rheinland for outdoor power generation of single-sided modules

Rated "Top Performance" by PVEL/DNV GL PV Module Reliability Scorecard for eight consecutive years

Awarded the "Top PV Brand" badge for the Middle East and North Africa region by EUPD Research 2023

Winner of the RETC 2022 PV Module "Top Performer Award"





# N-Type Technology

Due to the different doping technology of N-type, it has better performance in degradation compared to P-type products. In addition, the significant improvement of the bifacial factor and the optimization of the operating temperature bring higher yield gain. The LCOE is significantly lower than that of conventional P-type products.



\* Module test results, Sandy, 2P tracking stand, Hainan Province, China

## **HOT 2.0 Technology**

The efficient passivation contact technology is applied in HOT 2.0 cells, which updates the Micro-nano tunneling through the oxide layer and carrier selective lamination of microcrystalline silicon thin films on the rear side. This advanced structure contributes to better passivation performance and electrical con ductivity, increasing the cell efficiency and power generation performance. Under the mass production condition, the N-type HOT2.0 cell's maximum efficiency is close to 25.1% and has a broad application pros pect in the near future.



## Lower Temperature Coefficient

With a temperature coefficient of -0.29%/°C, compared to -0.35%/°C for P-type modules, N-type TOPCon technology is particularly effective in generating power in high temperature environments.

- Output power decreases with increasing temperature, JinkoSolar N-type temperature 4.9 coefficient is better than PERC (0.9% improvement on average) 47
- Tiger Neo's average daily operating temperature is lower than PERC's (<1°C) for the same external environment, resulting in lower heat loss.
- Tiger Neo brings more power generation in high temperature areas (+2% compared to P-type)



## **Better Quality Warranty**

Compared with conventional PERC modules, the power warranty of N-type modules is up to 30 years, and the first-year degradation is less than 1%, which guarantees that the output power will not be less than 87.40% of the original output power after 30 years.



## **Higher Bifacial Factor**

Compared to the 70% bifacial factor of conventional PERC modules. JinkoSolar N-Type TOPCon modules have an optimized bifacial factor of up to 85%. According to the theoretical formula, under standard operating conditions and average ground reflectivity, the power generation of conventional PERC modules due to bifacial factor is about 9.45%. The maximum 15% increase of Tiger Neo module in bifacial factor results in a bifacial gain of about 2% on top of the original.

#### Comparison of yield gain due to bifacial factor increase:

P-type combined power = P frontal*(1+6	3SI* Bifi)
PERC: BSI*Bifi (70%)~9.45%	*Bifi: Module bifacial rate
TOPCon: BSI*Bifi (85%) <b>~11.48%</b>	*BS1: Bifacial stress ambien irradiation coefficien

(depends on actual irradiation and ground reflectance)



P-type

**Bifacial factor** 85% Backside gain 11.48%

N-type

# **Bifacial Technology**

Bifacial technology brings more power generation





Up to 25% power gain depending on albedo and PV system design

#### Practical Yield Gain:



# Project data Support — Tiger Neo global field project



Loaction	Test Performer	Ground	I ype of Installation	Module Type	Test Type	Test Duration	Bifacial Gain
Ningxia, China	CPVT	Grass	Fixed	182-72N-Dual Glass 182-72P-Dual Glass	String	2022.9.01 - 2023.9.30	5.17%
Zhangbei, China	CGC	Grass	Tracker	182-72N-Dual Glass 182-72P-Dual Glass	String	2022.7.11 - 2023.9.30	4.80%
Ningbo, China	CAS	Cement	Tracker	182-72N-Dual Glass 182-72P-Dual Glass	String	2022.6.26 - 2023.9.30	4.65%
Hainan, China	CGC	Cement	Fixed	182-72N-Dual Glass 182-72P-Dual Glass	String	2022.8.01 - 2023.9.30	4.20%
Saudi Arabia	TUV Rheinland	Sand	Fixed	182-72N-Dual Glass 182-72P-Dual Glass 210-72P-Dual Glass	Module	2022.6.01 - 2022.12.31	5.57%
Malaysia	TUV Nord	Sand	Fixed	182-72N-Dual Glass 182-72P-Dual Glass 210-72P-Dual Glass	Module	2022.12.01 - 2023.3.31	6.67%



IEC61215(2016), IEC61730(2016)

ISO9001:2015: Quality Management System

ISO14001:2015: Environment Management System

ISO45001:2018: Occupational health and safety management systems

**Completes System and Product Certifications** 



Designed for residential commercial Utility 

# **Customer Benefits**



SMBB Technology

1500V

Hot 2.0 Technology



Saving BOS Cost

Higher power output





Durability Against Extreme Environmental Conditions



 Product	# of cells	Size/Weight	
 JKM565-585N-72HL4-(V)	144 cells (6×24)	2278×1134×35mm / 28.0kg	
 JKM560-580N-72HL4-BDV	144 cells (6×24)	2278×1134×30mm / 32.0kg	
 JKM600-620N-66HL4M-BDV	132 cells (2×66)	2382×1134×30mm / 33.4kg	
 JKM615-635N-78HL4-BDV	156 cells (2×78)	2465×1134×30mm / 34.6kg	



C CLEAN ENERGY COMPET

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Higher Lifetime Power Yield





Severe Weather Resilience





High Efficiency

# **Tiger Neo N-type** 72HL4-(V) 565-585 Watt

## MONO-FACIAL MODULE

N-Type

Positive power tolerance of 0~+3%

IEC61215(2016), IEC61730(2016) ISO9001:2015: Quality Management System

ISO14001:2015: Environment Management System

ISO45001:2018 Occupational health and safety management systems

## **Key Features**

#### **SMBB** Technology

Better light trapping and current collection to improve module power output and reliability.



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#### Hot 2.0 Technology HOT The N-type module with Hot 2.0 technology has better 2.0 reliability and lower LID/LETID.

PID Resistance

Excellent Anti-PID performance guarantee via optimized mass-production process and materials control.



87.4%

vears

#### **Enhanced Mechanical Load**

PV CYCLE

Certified to withstand: wind load (2400 Pascal) and snow load (5400 Pascal).

POSITIVE QUALITY

## • A+

**Durability Against Extreme Environmental** Conditions

High salt mist and ammonia resistance.

#### LINEAR PERFORMANCE WARRANTY



12 Year Product Warranty

**30** Year Linear Power Warranty

0.40% Annual Degradation Over 30 years





31pcs/pallets, 62pcs/stack, 620pcs/ 40'HQ Container

Packaging Configuration

(Two pallets = One stack)



Length: ±2mm

Width: ±2mm

leight: ±1mm

ow Pitch: ±2mr

SPECIFICATIONS											
Module Type	JKM570	)N-72HL4	JKM5751	N-72HL4	JKM5801	N-72HL4	JKM585N	I-72HL4	JKM590	N-72HL4	
	JKM570N	1-72HL4-V	JKM575N	J-72HL4-V	JKM5801	JKM580N-72HL4-V		JKM585N-72HL4-V		JKM590N-72HL4-V	
	STC	NOCT	STC	NOCT	STC	NOCT	STC	NOCT	STC	NOCT	
Maximum Power (Pmax)	570Wp	430Wp	575Wp	433Wp	580Wp	437Wp	585Wp	441Wp	590Wp	445Wp	
Maximum Power Voltage (Vmp	) 43.18V	40.03V	43.32V	40.20V	43.46V	40.36V	43.6V	40.52V	43.74V	40.68V	
Maximum Power Current (Imp)	13.21A	10.73A	13.28A	10.78A	13.35A	10.83A	13.42A	10.88A	13.49A	10.93A	
Open-circuit Voltage (Voc)	51.65V	39.25∨	51.78V	39.35V	51.91V	39.45V	52.04V	39.55∨	52.17V	39.65∨	
Short-circuit Current (Isc)	14.01A	11.31A	14.08A	11.37A	14.15A	11.42A	14.22A	11.48A	14.29A	11.53A	
Module Efficiency STC (%)	22.0	07%	22.2	26%	22.45	5%	22.6	5%	22.8	34%	
Operating Temperature(°C)					-40°C~+85	5°℃					
Maximum system voltage					1000/1500VD	DC (IEC)					
Maximum series fuse rating					25A						
Power tolerance					0~+3%						
Temperature coefficients of Pm	ax				-0.29%/%	С					
Temperature coefficients of Voo	C				-0.25%/%	С					
Temperature coefficients of Isc					0.045%/°	C					
Nominal operating cell tempera	ature (NC	DCT)			45±2℃						
*STC: Irradiance 1000W/m <sup>2</sup> Cell Temperature 25°C AM=1.5 NOCT: Irradiance 800W/m <sup>2</sup> Ambient Temperature 20°C AM=1.5 Wind Speed 1m/s											



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#### Electrical Performance & Temperature Dependence



lechanical Characteristics									
ell Type	N type Mono-crystalline								
o. of cells	144 (6×24)								
imensions	2278×1134×35mm (89.69×44.65×1.38 inch)								
/eight	26.5 kg (58.42 lbs)								
ont Glass	3.2mm,Anti-Reflection Coating, High Transmission, Low Iron, Tempered Glass								
ame	Anodized Aluminium Alloy								
unction Box	IP68 Rated								
output Cables	TUV 1×4.0mm <sup>2</sup> (+): 400mm (-): 200mm or Customized Length								

## **Tiger Neo N-type 72HL4-BDV** 560-580 Watt **BIFACIAL MODULE WITH**

DUAL GLASS

#### N-Type

Positive power tolerance of 0~+3%

IEC61215(2016), IEC61730(2016)

ISO9001:2015: Quality Management System

ISO14001:2015: Environment Management System

ISO45001:2018 Occupational health and safety management systems

## **Key Features**

#### **SMBB** Technology

Better light trapping and current collection to improve module power output and reliability.



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#### Hot 2.0 Technology HOT The N-type module with Hot 2.0 technology has better reliability and lower LID/LETID.

#### PID Resistance

Excellent Anti-PID performance guarantee via optimized mass-production process and materials control.



2.0

#### Enhanced Mechanical Load

Certified to withstand: wind load (2400 Pascal) and snow load (5400 Pascal).

**Higher Power Output** Module power increases 5-25% generally, bringing significantly lower LCOE and higher IRR.



#### LINEAR PERFORMANCE WARRANTY



12 Year Product Warranty

**30** Year Linear Power Warranty

0.40% Annual Degradation Over 30 years







Packaging Configuration

(Two pallets = One stack)

36pcs/pallets, 72pcs/stack, 720pcs/ 40'HQ Container

SPECIFICATIONS										
Module Type	JKM560N-	72HL4-BDV	JKM565N-	72HL4-BDV	JKM570N-	72HL4-BDV	JKM575N-	72HL4-BDV	JKM580N-	-72HL4-BDV
	STC	NOCT	STC	NOCT	STC	NOCT	STC	NOCT	STC	NOCT
Maximum Power (Pmax)	560Wp	421Wp	565Wp	425Wp	570Wp	429Wp	575Wp	432Wp	580Wp	436Wp
Maximum Power Voltage (Vmp)	41.95V	39.39V	42.14V	39.52V	42.29V	39.65V	42.44V	39.78V	42.59V	39.87V
Maximum Power Current (Imp)	13.35A	10.69A	13.41A	10.75A	13.48A	10.81A	13.55A	10.87A	13.62A	10.94A
Open-circuit Voltage (Voc)	50.67V	48.13V	50.87V	48.32V	51.07V	48.51V	51.27V	48.70V	51.47V	48.89V
Short-circuit Current (Isc)	14.13A	11.41A	14.19A	11.46A	14.25A	11.50A	14.31A	11.55A	14.37A	11.60A
Module Efficiency STC (%)	21.	68%	21.	.87%	22.	07%	22.2	26%	22.	45%
Operating Temperature(°C)					-40°C~	+85℃				
Maximum system voltage					1500VD	C (IEC)				
Maximum series fuse rating					30	A(				
Power tolerance					0~+	-3%				
Temperature coefficients of Pmax					-0.29	%/℃				
Temperature coefficients of Voc					-0.25	%/°C				
Temperature coefficients of Isc					0.045	5%/°C				
Nominal operating cell temperatu	ure (NOCT)				45±	2°C				
Refer. Bifacial Factor					80±	5%				

BIFACI	BIFACIAL OUTPUT-REARSIDE POWER GAIN										
5%	Maximum Power (Pmax)	588Wp	593Wp	599Wp	604Wp	609Wp					
	Module Efficiency STC (%)	22.77%	22.97%	23.17%	23.37%	23.57%					
15%	Maximum Power (Pmax)	644Wp	650Wp	656Wp	661Wp	667Wp					
	Module Efficiency STC (%)	24.93%	25.15%	25.37%	25.60%	25.82%					
25%	Maximum Power (Pmax)	700Wp	706Wp	713Wp	719Wp	725Wp					
	Module Efficiency STC (%)	27.10%	27.34%	27.58%	27.82%	28.07%					



Ambient Temperature 20°C

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#### Electrical Performance & Temperature Dependence

Mechanica	I Characteristics
Cell Type	N type Mono-crystalline
No. of cells	144 (2×72)
Dimensions	2278×1134×30mm (89.69×44.65×1.18 inch)
Weight	32 kg (70.55 lbs)
Front Glass	2.0mm, Anti-Reflection Coating
Back Glass	2.0mm, Heat Strengthened Glass
Frame	Anodized Aluminium Alloy
Junction Box	IP68 Rated
Output Cables	TUV 1×4.0mm² (+): 400mm , (-): 200mm or Customized Length



# **Tiger Neo N-type** 66HL4M-BDV 600-620 Watt

#### **BIFACIAL MODULE WITH** DUAL GLASS

#### N-Type

Positive power tolerance of 0~+3%

IEC61215(2016), IEC61730(2016)

ISO9001:2015: Quality Management System

ISO14001:2015: Environment Management System

ISO45001:2018 Occupational health and safety management systems

## **Key Features**

#### **SMBB** Technology

PID Resistance

control.

Better light trapping and current collection to improve module power output and reliability.



#### Hot 2.0 Technology HOT 2.0

#### The N-type module with Hot 2.0 technology has better

reliability and lower LID/LETID.



#### **Enhanced Mechanical Load**

Certified to withstand: wind load (2400 Pascal) and snow load (5400 Pascal).

#### Higher Power Output

Module power increases 5-25% generally, bringing significantly lower LCOE and higher IRR.

Excellent Anti-PID performance guarantee via

optimized mass-production process and materials



#### LINEAR PERFORMANCE WARRANTY

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12 Year Product Warranty

**30** Year Linear Power Warranty

0.40% Annual Degradation Over 30 years

#### **Engineering Drawings**

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# Row Pitch: ±2m

#### Packaging Configuration

(Two pallets = One stack)

36pcs/pallets, 72pcs/stack, 720pcs/ 40'HQ Container

SPECIFICATIONS										
Module Type	JKM600N-	66HL4M <b>-</b> BDV	JKM605N-66HL4M-BDV		JKM610N-66HL4M-BDV		JKM615N-66HL4M-BDV		JKM620N <b>-</b> 661	hl4m-bdv
	STC	NOCT	STC	NOCT	STC	NOCT	STC	NOCT	STC	NOCT
Maximum Power (Pmax)	600Wp	453Wp	605Wp	457Wp	610Wp	461Wp	615Wp	464Wp	620Wp	468Wp
Maximum Power Voltage (Vmp)	40.16V	37.60V	40.31V	37.76V	40.46V	37.92V	40.60V	38.10V	40.74V	38.25V
Maximum Power Current (Imp)	14.94A	12.05A	15.01A	12.10A	15.08A	12.15A	15.15A	12.19A	15.22A	2.24A
Open-circuit Voltage (Voc)	48.28V	45.86V	48.48V	46.05V	48.68V	46.24V	48.88V	46.43V	49.08V	46.62V
Short-circuit Current (Isc)	15.84A	12.79A	15.90A	12.83A	15.96A	12.88A	16.02A	12.92A	16.08A	12.95A
Module Efficiency STC (%)	22.	21%	22	.40%	22.5	58%	22	.77%	22.9	95%
Operating Temperature(°C)				-40°C~+85℃						
Maximum system voltage					1500VD	C (IEC)				
Maximum series fuse rating					30	A				
Power tolerance					0~+	-3%				
Temperature coefficient of Pmax					-0.298	3%/℃				
Temperature coefficient of Voc					-0.25	%/°C				
Temperature coefficient of lsc					0.046	%/°C				
Nominal operating cell temperature (N	IOCT)				45±	2°C				
Refer. Bifacial Factor					80±	:5%				

BIF	BIFACIAL OUTPUT-REARSIDE POWER GAIN									
5%	Maximum Power (Pmax)	630Wp	635Wp	641Wp	646Wp	651Wp				
	Module Efficiency STC (%)	23.32%	23.52%	23.71%	23.91%	24.10%				
15%	Maximum Power (Pmax)	690Wp	696Wp	702Wp	707Wp	713Wp				
	Module Efficiency STC (%)	25.54%	25.76%	25.97%	26.18%	26.40%				
25%	Maximum Power (Pmax)	750Wp	756Wp	763Wp	769Wp	775Wp				
	Module Efficiency STC (%)	27.77%	28.00%	28.23%	28.46%	28.69%				

NOCT: *i* Irradiance 800W/m<sup>2</sup>

\*STC: 💓 Irradiance 1000W/m<sup>2</sup>

Ambient Temperature 20°C

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Cell Temperature 25°C

#### Electrical Performance & Temperature Dependence

Current-Voltage & Power-Voltage Curves (610W)

Temperature Dependence of Isc,Voc,Pmax



Voltage (V)

Mechanica	I Characteristics
Cell Type	N type Mono-crystalline
No. of cells	132 (2×66)
Dimensions	2382×1134×30mm (93.78×44.65×1.18 inch)
Weight	33.4kg (73.63 lbs)
Front Glass	2.0mm, Anti-Reflection Coating
Back Glass	2.0mm, Heat Strengthened Glass
Frame	Anodized Aluminium Alloy
Junction Box	IP68 Rated
Output Cables	TUV 1×4.0mm <sup>*</sup> (+): 400mm , (-): 200mm or Customized Length



# **Tiger Neo N-type 78HL4-BDV** 615-635 Watt

**BIFACIAL MODULE WITH** DUAL GLASS

#### N-Type

Positive power tolerance of 0~+3%

IEC61215(2016), IEC61730(2016) ISO9001:2015: Quality Management System

ISO14001:2015: Environment Management System

ISO45001:2018 Occupational health and safety management systems

## **Key Features**

#### **SMBB** Technology

Better light trapping and current collection to improve module power output and reliability.



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#### Hot 2.0 Technology HOT The N-type module with Hot 2.0 technology has better 2.0 reliability and lower LID/LETID.

**PID Resistance** 

Excellent Anti-PID performance guarantee via optimized mass-production process and materials control.



#### **Enhanced Mechanical Load**

PV CYCLE

F

Certified to withstand: wind load (2400 Pascal) and snow load (5400 Pascal).

POSITIVE QUALITY

#### **Higher Power Output**

Module power increases 5-25% generally, bringing significantly lower LCOE and higher IRR.

## LINEAR PERFORMANCE WARRANTY



12 Year Product Warranty

**30** Year Linear Power Warranty

0.40% Annual Degradation Over 30 years





B-B

#### Packaging Configuration

(Two pallets = One stack)

36pcs/pallets, 72pcs/stack, 576pcs/ 40'HQ Containe

S	PE	C	FI	C	AT	10	N	S

SPECIFICATIONS										
Module Type	JKM615N-7	78HL4-BDV	JKM620N-7	8HL4 <b>-</b> BDV	JKM625N-78HL4-BDV		/ JKM630N-78HL4-BDV		JKM635N <b>-</b> 78	3HL4-BDV
	STC	NOCT	STC	NOCT	STC	NOCT	STC	NOCT	STC	NOCT
Maximum Power (Pmax)	615Wp	462Wp	625Wp	466Wp	630Wp	470Wp	630Wp	474Wp	635Wp	478Wp
Maximum Power Voltage (Vmp)	45.77V	42.46V	45.93V	42.57V	46.10V	42.68V	46.26V	42.79V	46.42V	42.90V
Maximum Power Current (Imp)	13.44A	10.89A	13.50A	10.95A	13.56A	11.01A	13.62A	11.07A	13.68A	11.13A
Open-circuit Voltage (Voc)	55.44V	52.66V	55.58V	52.79V	55.72V	52.93V	55.86V	53.06V	55.97V	53.17V
Short-circuit Current (Isc)	14.11A	11.39A	14.19A	11.46A	14.27A	11.52A	14.35A	11.59A	14.43A	11.65A
Module Efficiency STC (%)	22.0	22.00% 22.18%		8%	22.3	36%	22.5	54%	22.72%	
Operating Temperature(°C)					-40°C~	+85°C				
Maximum system voltage					1500VD	C (IEC)				
Maximum series fuse rating					30	A				
Power tolerance					0~+	3%				
Temperature coefficients of Pmo	ах				-0.299	%/°C				
Temperature coefficients of Voc	:				-0.25	%/°C				
Temperature coefficients of Isc					0.045	%/°C				
Nominal operating cell tempera	ture (NOC	T)			45±2	2°C				
Refer. Bifacial Factor					80±	5%				

BIFAC	IAL OUTPUT-REARSID	E POWER (	GAIN			
	Maximum Power (Pmax)	646Wp	651Wp	656Wp	662Wp	667Wp
5%	Module Efficiency STC (%)	23.10%	23.29%	23.48%	23.66%	23.86%
	Maximum Power (Pmax)	707Wp	713Wp	719Wp	725Wp	730Wp
15%	Module Efficiency STC (%)	25.30%	25.51%	25.71%	25.92%	26.12%
0.577	Maximum Power (Pmax)	769Wp	775Wp	781Wp	788Wp	794Wp
25%	Module Efficiency STC (%)	27.50%	27.73%	27.95%	28.17%	28.40%



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#### Electrical Performance & Temperature Dependence



Voltage (V)

Temperature Dependence of Isc,Voc,Pmax



Cell Temperature ("C

Mechanica	Characteristics
Cell Type	N type Mono-crystalline
No. of cells	156 (2×78)
Dimensions	2465×1134×30mm (97.05×44.65×1.18 inch)
Weight	34.6kg (76.38 lbs)
Front Glass	2.0mm, Anti-Reflection Coating
Back Glass	2.0mm, Heat Strengthened Glass
Frame	Anodized Aluminium Alloy
Junction Box	IP68 Rated
Output Cables	TUV 1×4.0mm <sup>°</sup> (+): 400mm , (-): 200mm or Customized Length









Designed for 

# **Customer Benefits**





Multi Busbar

PID Resistance



Saving BOS Cost

1500V

Higher power output



Low-light Performance

Product	# of cells	Size/Weight	
JKM540-560M-72HL4-{V)	72 Cells	2278×1134×35mm / 28.0kg	
JKM535-555M-72HL4-BDVP	78 Cells	2278×1134×30mm / 32.0kg	

**Completes System and Product Certifications** 

IEC61215(2016), IEC61730(2016)

ISO9001:2015: Quality Management System

ISO14001:2015: Environment Management System

ISO45001:2018: Occupational health and safety management systems





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Higher Lifetime Power Yield





Severe Weather Resilience



Durability Against Extreme Environmental Conditions



High Efficiency

# **Tiger Pro 72HC** 540-560 Watt

## MONO-FACIAL MODULE

#### P-Type

Positive power tolerance of 0~+3%

IEC61215(2016), IEC61730(2016)

ISO9001:2015: Quality Management System

ISO14001:2015: Environment Management System

ISO45001:2018 Occupational health and safety management systems

## **Key Features**

#### Multi Busbar Technology

Better light trapping and current collection to improve module power output and reliability.



**Durability Against Extreme Environmental** Conditions High salt mist and ammonia resistance.

→ MBB HC Technology



#### **Reduced Hot Spot Loss**

Optimized electrical design and lower operating current for reduced hot spot loss and better temperature coefficient.



## Longer Life-time Power Yield

0.55% annual power degradation and 25 year linear power warranty.



#### Enhanced Mechanical Load Certified to withstand: wind load (2400 Pascal) and snow load (5400 Pascal).

#### PV CYCLE POSITIVE QUALITY

## LINEAR PERFORMANCE WARRANTY



12 Year Product Warranty

25 Year Linear Power Warranty

0.55% Annual Degradation Over 25 years



Solar

Building Your Trust in Solar





#### Packaging Configuration (Two pallets = One stack)

31pcs/pallets, 62pcs/stack, 620pcs/ 40'HQ Container

Module Type	JKM540 JKM540N	М-72HL4 Л-72HL4-V	JKM5451 JKM545M	M-72HL4 -72HL4-V	JKM5501 JKM550N	M-72HL4 1-72HL4-V	JKM555 JKM555N	M-72HL4 1-72HL4-V	JKM560 JKM560N	M-72HL4 1-72HL4-V
	STC	NOCT	STC	NOCT	STC	NOCT	STC	NOCT	STC	NOCT
Maximum Power (Pmax)	540Wp	402Wp	545Wp	405Wp	550Wp	409Wp	555Wp	413Wp	560Wp	417Wp
Maximum Power Voltage (Vmp)	40.70V	38.08V	40.80V	38.25V	40.90V	38.42V	40.99V	38.59V	41.09V	38.69V
Maximum Power Current (Imp)	13.27A	10.55A	13.36A	10.60A	13.45A	10.65A	13.54A	10.70A	13.63A	10.77A
Open-circuit Voltage (Voc)	49.42V	46.65V	49.52V	46.74V	49.62V	46.84V	49.72V	46.93V	49.82V	47.02V
Short-circuit Current (Isc)	13.85A	11.19A	13.94A	11.26A	14.03A	11.33A	14.12A	11.40A	14.21A	11.48A
Module Efficiency STC (%)	20.	90%	21.	10%	21.	29%	21.4	48%	21.	68%
Operating Temperature(°C)					-40°C~	+85°C				
Maximum system voltage					1000/1500	VDC (IEC)				
Maximum series fuse rating					25	iА				
Power tolerance					0~+	-3%				
Temperature coefficients of Pmax					-0.35	%/°C				
Temperature coefficients of Voc					-0.28	%/°C				
Temperature coefficients of lsc					0.048	%/°C				
Nominal operating cell temperatur	e (NOCT)				45±	2°C				

Irradiance 800W/m 

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#### Electrical Performance & Temperature Dependence



Mechanica	I Characteristics
Cell Type	P type Mono-crystalline
No. of cells	144 (6×24)
Dimensions	2278×1134×35mm (89.69×44.65×1.38 inch)
Weight	28 kg (61.73 lbs)
Front Glass	3.2mm,Anti-Reflection Coating, High Transmission, Low Iron, Tempered Glass
Frame	Anodized Aluminium Alloy
Junction Box	IP68 Rated
Output Cables	TUV 1×4.0mm (+): 400mm , (-): 200mm or Customized Length



# **Tiger Pro 72HC-BDVP** 535-555 Watt

**BIFACIAL MODULE WITH** DUAL GLASS

#### P-Type

Positive power tolerance of 0~+3%

IEC61215(2016), IEC61730(2016)

ISO9001:2015: Quality Management System

ISO14001:2015: Environment Management System

ISO45001:2018 Occupational health and safety management systems

## **Key Features**



Bifacial Technology



#### Multi Busbar Technology Better light trapping and current collection to improve

module power output and reliability.



Longer Life-time Power Yield 0.45% annual power degradation and 30 year linear power warranty.

PID Resistance Excellent Anti-PID performance guarantee via optimized mass-production process and materials control.



#### **Enhanced Mechanical Load** Certified to withstand: wind load (2400 Pascal) and snow load (5400 Pascal).



#### **Higher Power Output**

Module power increases 5-25% generally, bringing significantly lower LCOE and higher IRR.



## LINEAR PERFORMANCE WARRANTY



12 Year Product Warranty

**30** Year Linear Power Warranty

0.45% Annual Degradation Over 30 years

#### **Engineering Drawings**





Packaging Configuration

(Two pallets = One stack)

35pcs/pallets, 70pcs/stack, 700pcs/ 40'HQ Container

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-					

Module Type	JKM535M-7	2HL4-BDVP	JKM540M-7	2HL4-BDVP	JKM545M-3	72HL4-BDVP	JKM550M-72HL4-BDVP		JKM555M-72HL4-BDVP		
	STC	NOCT	STC	NOCT	STC	NOCT	STC	NOCT	STC	NOCT	
Maximum Power (Pmax)	535Wp	398Wp	540Wp	402Wp	545Wp	405Wp	550Wp	409Wp	555Wp	413Wp	
Maximum Power Voltage (Vmp)	40.94V	37.94V	41.13V	38.08V	41.32V	38.25V	41.50V	38.42V	41.70V	38.59V	
Maximum Power Current (Imp)	13.07A	10.49A	13.13A	10.55A	13.19A	10.60A	13.25A	10.65A	13.31A	10.74A	
Open-circuit Voltage (Voc)	49.54V	46.76V	49.73V	46.94V	49.92V	47.12V	50.11V	47.30V	50.30V	47.48V	
Short-circuit Current (Isc)	13.83A	11.17A	13.89A	11.22A	13.95A	11.27A	14.01A	11.32A	14.07A	11.36A	
Module Efficiency STC (%)	20.	20.71%		20.90%		21.10%		21.29%		48%	
Operating Temperature(°C)					-40°C~	-40°C~+85°C					
Maximum system voltage					1500VD	C (IEC)					
Maximum series fuse rating					30	A					
Power tolerance					0~+	-3%					
Temperature coefficients of Pma	х				-0.35	%/°C					
Temperature coefficients of Voc					-0.28	%/°C					
Temperature coefficients of Isc					0.048	%/°C					
Nominal operating cell temperat	ure (NOCT)				45±	2°C					
Refer. Bifacial Factor					70±	:5%					

Refer. Bif	acial Factor		70±5%	70±5%					
BIFAC	IAL OUTPUT-REARSIDE	POWER GAI	N						
5%	Maximum Power (Pmax)	562Wp	567Wp	572Wp	578Wp	583Wp			
	Module Efficiency STC (%)	21.76%	21.95%	22.14%	21.37%	22.57%			
15%	Maximum Power (Pmax)	615Wp	621Wp	623Wp	633Wp	638Wp			
	Module Efficiency STC (%)	23.81%	24.04%	24.27%	24.50%	24.70%			
25%	Maximum Power (Pmax)	669Wp	675Wp	681Wp	688Wp	694Wp			
	Module Efficiency STC (%)	25.90%	26.13%	26.36%	26.63%	26.87%			



Cell Temperature 25°C Ambient Temperature 20°C

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#### Electrical Performance & Temperature Dependence

Current-Voltage & Power-Voltage Curves (535W)



Voltage (V)

Temperature Dependence of Isc,Voc,Pmax



Mechanica	l Characteristics
Cell Type	P type Mono-crystalline
No. of cells	144 (6×24)
Dimensions	2278×1134×30mm (89.69×44.65×1.18 inch)
Weight	32 kg (70.55 lbs)
Front Glass	2.0mm, Anti-Reflection Coating
Back Glass	2.0mm, Heat Strengthened Glass
Frame	Anodized Aluminium Alloy
Junction Box	IP68 Rated
Output Cables	TUV 1×4.0mm <sup>°</sup> (+): 400mm , (-): 200mm or Customized Length

AM=1.5

AM=1.5

# **BIPV Introduction**

The photovoltaic power generation module panel and other electrical equipment are directly installed on the roof or Building facade.







Natural

Sound





6+6mm double layer toughened glass



1



3C quality certification



Superposition of double PVB film

7/E

High mechanical load

Over 50% improvement

Optimized sound insulation performance

# **BIPV Product: Jinko Curtain Wall**

Jinko Transparent + All Black Curtain Wall Series

#### Comprehensive scene coverage

meet the needs of most commercial and public buildings;

#### Adjustable light transmittance

Light transmittance can be adjusted according to application scenes, considering both the beauty and performance;

Jinko colorful curtain wall series



JinkoSolar BIPV Series Color Steel Tile Solution

#### Frameless modules

Non-dust accumulation design

#### Compatibility Upgrade

Different color steel tile sizes available

Compatible with existing color tile roofs

#### **Double Glass Fixture**

Modules on top of color tiles Shadow shading design



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#### Abundant color options

Rich colors, more in line with modem architectural oesthetics;

#### ♦ High freedom of style

The size, shape and power can be customized according to The customer's demand and its applicatiion area;



#### Optimized Heat Dissipation Performance

Fixed color steel tiles by locking clips and clamps Large pitch channel design reduces operating temperature

12°C, improve more than 4% power generation

#### Intelligen Optimized Chip

Shade free Increase power generation by more than 2%

# BIPV **Color Steel Tile System**



#### Standard & Certificate

·IEC61730(2016) ·EN13501-1

·IEC61215(2016) ·GB 8624 ·ISO9001: 2015, Quality Management System ·ISO14001: 2015, Environment Management System ·ISO45001: 2018, Occupational health and safety management





#### **Key Features**



#### Waterproof

Frameless double glass PV module forms perfect waterproof capacity and drainage system



#### Long reliability

Dual glass structure guarantees lower risk of crack, better corrosion resistance and no diffusivity



#### **Dual function**

Replacing conventional building envelope materials, with functions of building skin and power generator

#### **SPECIFICATIONS**

Module Type	JKBS355N-48HL4-BDV		JKBS360N-48HL4-BDV		JKBS365N-48HL4-BDV		JKBS370N-48HL4-BDV		JKBS375N-48HL4-BDV	
	STC	NOCT	STC	NOCT	STC	NOCT	STC	NOCT	STC	NOCT
Maximum Power (Pmax)	360Wp	271Wp	365Wp	274Wp	370Wp	278Wp	375Wp	282Wp	380Wp	286Wp
Maximum Power Voltage (Vmp)	28. 28V	26. 49V	28. 47V	26. 70V	28.66V	26.86V	28.85V	27. 02V	29.04V	27.18V
Maximum Power Current (Imp)	12.73A	10.22A	12.82A	10.28A	12.91A	10.36A	13.00A	10.44A	13.09A	10.52A
Open-circuit Voltage (Voc)	33. 97V	32. 27V	34. 06V	32.35V	34. 23V	32.51V	34. 40V	32.67V	34. 57V	32.83V
Short-circuit Current (Isc)	13.38A	10. BOA	13.43A	10.84A	13.53A	10.92A	13.63A	11.00A	13.73A	11.08A
Module Efficiency STC (%)	20.	63%	20.	92%	21.	20%	21.	49%	21.	83%
Operating Temperature (C)					-40°C~	+85℃				
Maximum System Voltage					1500VD	C (IEC)				
Maximum Series Fuse Rating					30	A				
Power Tolerance					0~+	-3%				
Temperature Coefficients of (Pmax)					-0.29	%/℃				
Temperature Coefficients of (Voc)					-0.25	ï%/℃				
Temperature Coefficients of (Isc)					0.046	5%/°C				
Nominal Operating Cell Temperatur	re (NOCT)				45±	:2°C				

#### **Mechanical Characteristics**

Thickness of Color Steel: 0.6mm Strength of Color Steel: ≥Q345 Thickness of Coating: >150g/m<sup>2</sup> Cell Type: N-type Cell Number of Half-cells: 96(8x12) Dimensions: 2272×768×5mm

#### **Packaging Configuration**

(Two pallets = One stack)

32pcs/pallet, 64pcs/stack, 640pcs/40'HQ Container

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Efficient Power Generation N-Type TOPCon modules, with a power generation increase of over 3% **Superb Waterproofing** 360° edge-locking structure, suitable for continuous installation Reliable Fire Resistance | System combustion rating is Class A, non-combustible material Ultimate Wind Resistance Can withstand up to wind level 16 **Construction-Friendly** Self-developed fixtures for installation, sturdy and reliable, easy to install and dismantle

Worry-Free Operation and Maintenance Modules can be walked on, no need for inspection channels, intelligent operation and maintenance

Ultra-Long Lifespan 30 years of integrated design lifespan

\* Suitable for new construction or renovation of industrial and commercial buildings, factory roofs, sheds, and other scenarios.



Solar JinKO







#### **High efficiency**

Higher-density cell arrangement can put more cells per unit area and achieve higher efficiency



#### Strong safety

Double layers of tempered glass with class A of fireproofing leads to better wind load, heat resistance and frost resistance



#### Architectural design element

Inherent advantages of integration in module design

Weight: 20 kg	Output Cables:
Front/Back Glass: 2.0mm strength toughened glass	TÜV x4.0mm²,
Junction Box: IP68 Rated	or Customized Lengt



#### **Engineering Drawings**

1150mm

Length: ±2 mm

Width: ±2 mm

Height: ±1 mm

Row Pitch: ±2 mr

17pcs/pallet , 34pcs/stack, 340pcs/40'HQ Container or customized

STC

NOCT

180 Wp 135 Wp

5.45 A 4.40 A

38,5 A 36,2 V

5,89 A 4,75 A

8,94 %

**Packaging Configuration** 

(Two pallets = One stack)

**SPECIFICATIONS** 

Maximum Power (Pmax)

Maximum Power Current (Imp)

Open-circuit Voltage (Voc)

Short-circuit Current (Isc)

Module Efficiency STC (%)

Operating Temperature(°C) Maximum system voltage Maximum series fuse rating

Temperature coefficient of Pmax Temperature coefficient of Voc Temperature coefficient of Iso

Nominal operating cell temperature (NOCT)

\*STC: is Irradiance 1000W/m<sup>2</sup>

NOCT: *i* Irradiance 800W/m<sup>2</sup>

\* Power measurement tolerance: ±3 %

Power tolerance

Maximum Power Voltage (Vmp) 33,0 V 30,7 V

Module Type



Cel

Dim

Fro

Οu

# **All-Red BIPV** 180-200 Watt

## Building Integrated PV

Positive power tolerance of 0~+3%

IEC61215(2016), IEC61730(2016)

ISO9001:2015: Quality Management System

ISO14001:2015: Environment Management System

ISO45001:2018 Occupational health and safety management systems

## **Key Features**



#### **Elegant and Compact Design**

One of the main advantages in solar architecture. Aesthetic appeal without metal wire exposition.



#### **Reliable performance**

Dual glass structure guarantees lower crack and no diffusivity, also better corrosion resistance and less risk in transportation.



#### A Wide Range of Colors

A rich palette of colors that fits different architectural styles.



#### Power Generated Building

Integrated power generator can meet the requirements for energy-saving buildings.

#### **PERFORMANCE WARRANTY**

**5** Year Product Warranty



10% in the first 10 years and 20% in the remain 15 years



# QQ

First-class safety

**Higher Efficiency** 

Double layers of tempered glass with fire safety class A, enhanced wind load, heat resistance and frost resistance.

More cells per unit area and higher module efficiency

thanks to a higher-density cell arrangement.



#### **Building Integrated**

Fully compliant with the electrical building safety, which makes it the ideal solution for BIPV.

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JKBF180N-54HL4-BDV-R1D JKBF185N-54HL4-BDV-R1D JKB

STC NOCT

185 Wp 139 Wp

33,0 V 30,7 V

5,60 A 4,53 A

38,5 V 36,2 V

6,05 A 4,89 A

9,19 %

Cell Temperature 25°C

Ambient Temperature 20°C

#### Electrical Performance & Temperature Dependence



Temperature Dependence of lsc,Voc,Pmax



Mechanical Characteristics						
Cell Type	Monocystalline N-Type					
No. of cells	108					
Dimensions	1750×1150×11,5mm (68,90×45.27×0,45 inch)					
Weight	54,61 kg (120,39 lbs)					
Front/Black Glass	5,0 mm+5,0 mm tempered glass					
Junction Box	IP68 Rated					
Output Cables	TUV 1×4.0mm <sup>*</sup> (+): 400mm , (-): 200mm or Customized Length					

F190N-54	HL4-BDV-R1D	JKBF195N-54H	HL4-BDV-R1D	JKBF200N-54HI	-4-BDV-R1D
STC	NOCT	STC	NOCT	STC	NOCT
90 Wp	143 Wp	195 Wp	147 Wp	200 Wp	150 Wp
33,0 V	30,7 V	33,0 V	30,7 V	33,0 V	30,7 V
5,75 A	4,65 A	5,91 A	4,77 A	6,06 A	4,89 A
38,5 V	36,2 V	38,5 V	36,2 V	38,5 V	36,2 V
6,21 A	5,02 A	6,38 A	5,15 A	6,54 A	5,28 A
9,4	4 %	9,6	9 %	9,94	4 %
-0,4°C~	+85°C				
0/1500	VDC (IEC)				
25	A				
0~+;	3 %				
-0,29 9	%/°C				
-0,25	%/°C				
-0,045	%/°C				
45±2	2°C				
6	AM	=1.5			

Wind Speed 1m/s

AM=1.5



#### **Engineering Drawings**



## Building Integrated PV

Positive power tolerance of 0~+3%

IEC61215(2016), IEC61730(2016)

ISO9001:2015: Quality Management System ISO14001:2015: Environment Management System

ISO45001:2018 Occupational health and safety management systems



**Higher Efficiency** 

First-class safety

**Building Integrated** 

makes it the ideal solution for BIPV.

More cells per unit area and higher module efficiency

Double layers of tempered glass with fire safety class A,

Fully compliant with the electrical building safety, which

enhanced wind load, heat resistance and frost resistance.

thanks to a higher-density cell arrangement.

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## **Key Features**



#### **Elegant and Compact Design**

One of the main advantages in solar architecture. Aesthetic appeal without metal wire exposition.



#### Reliable performance

Dual glass structure guarantees lower crack and no diffusivity, also better corrosion resistance and less risk in transportation.



#### A Wide Range of Colors

A rich palette of colors that fits different architectural styles.



#### Power Generated Building

Integrated power generator can meet the requirements for energy-saving buildings.

## **PERFORMANCE WARRANTY**

**5** Year Product Warranty

**25** Year Power Warranty

10% in the first 10 years and 20% in the remain 15 years





#### Packaging Configuration

(Two pallets = One stack)

#### 17pcs/pallet , 34pcs/stack, 340pcs/40'HQ Container or customized

#### 

Module Type	JKBF375N-54	HL4-BDV-BOD	JKBF380N-54	HL4-BDV-BOD	JKBF385N-54H	IL4-BDV-BOD	JKBF390N-54	HL4-BDV-BOD	JKBF395N-54	HL4-BDV-B0D
	STC	NOCT	STC	NOCT	STC	NOCT	STC	NOCT	STC	NOCT
Maximum Power (Pmax)	375 Wp	282 Wp	380 Wp	286 Wp	385 Wp	289 Wp	390 Wp	293 Wp	395 Wp	297 Wp
Maximum Power Voltage (Vmp)	33,5 V	31,1 V	33,5 V	31,1 V	33,5 V	31,1 V	33,5 V	31,1 V	33,5 V	31,1 V
Maximum Power Current (Imp)	11,21 A	9,05 A	11,36 A	9,17 A	11,51 A	9,30 A	11,66 A	9,42 A	11,81 A	9,54 A
Open-circuit Voltage (Voc)	38,5 V	36,2 V	38,5 V	36,2 V	38,5 V	36,2 V	38,5 V	36,2 V	38,5 V	36,2 V
Short-circuit Current (Isc)	12,11 A	9,78 A	12,27 A	9,91 A	12,43 A	10,04 A	12,59 A	10,17 A	12,75 A	10,30 A
Module Efficiency STC (%)	18,6	63 %	18,8	38 %	19,1	3 %	19,3	38 %	19,6	63 %
Operating Temperature(°C)	-0,4°C~+85°C									
Maximum system voltage					1000/1500	VDC (IEC)				
Maximum series fuse rating	25 A									
Power tolerance					0~+3	3 %				
Temperature coefficient of Pmax					-0,29 9	%/°C				
Temperature coefficient of Voc	-0,25 %/°C									
Temperature coefficient of lsc	-0,045 %/°C									
Nominal operating cell temperature (NOCT) 45±2°C										



\* Power measurement tolerance: ±3 %

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\* The parameters of BIPV product are determined according to detailed customization information, the datasheet is just for your reference. Specifications included in this datasheet are subject to change without notice for product improvement.

#### Electrical Performance & Temperature Dependence



Mechanical Characteristics						
Cell Type	Monocystalline N-Type					
No. of cells	108					
Dimensions	1750×1150×11,5mm (68,90×45.27×0,45 inch)					
Weight	54,61 kg (120,39 lbs)					
Front/Black Glass	5,0 mm+5,0 mm tempered glass					
Junction Box	IP68 Rated					
Output Cables	TUV 1×4.0mm <sup>*</sup> (+): 400mm , (-): 200mm or Customized Length					

AM=1.5



#### **Engineering Drawings**

# **Transparent BIPV** 245-265 Watt

## Building Integrated PV

Positive power tolerance of 0~+3%

IEC61215(2016), IEC61730(2016)

ISO9001:2015: Quality Management System

ISO14001:2015: Environment Management System

ISO45001:2018 Occupational health and safety management systems

## **Key Features**



#### **Elegant and Compact Design**

One of the main advantages in solar architecture. Aesthetic appeal without metal wire exposition.



#### Reliable performance

Dual glass structure guarantees lower crack and no diffusivity, also better corrosion resistance and less risk in transportation.



#### A Wide Range of Colors

A rich palette of colors that fits different architectural styles.



#### Power Generated Building

Integrated power generator can meet the requirements for energy-saving buildings.

#### **PERFORMANCE WARRANTY**

**5** Year Product Warranty



10% in the first 10 years and 20% in the remain 15 years



#### More cells per unit area and higher module efficiency thanks to a higher-density cell arrangement.

**Higher Efficiency** 

#### First-class safety

Double layers of tempered glass with fire safety class A, enhanced wind load, heat resistance and frost resistance.



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#### **Building Integrated**

Fully compliant with the electrical building safety, which makes it the ideal solution for BIPV.

# 1150mm



#### **Packaging Configuration**

(Two pallets = One stack)

17pcs/pallet, 34pcs/stack, 340pcs/40'HQ Container or customized

#### **SPECIFICATIONS**

Module Type	JKBF245N-36H	IL4-BDV-TODH	JKBF250N-36	HL4-BDV-TOD	H JKBF255N-36	HL4-BDV-T0DH	JKBF260N-36	HL4-BDV-T0DH	JKBF265N-36HI	-4-BDV-T0DH
	STC	NOCT	STC	NOCT	STC	NOCT	STC	NOCT	STC	NOCT
Maximum Power (Pmax)	245 Wp	184 Wp	250 Wp	188 Wp	255 Wp	192 Wp	260 Wp	195 Wp	265 Wp	199 Wp
Maximum Power Voltage (Vm	p) 22,2 V	20,2 V	22,2 V	20,6 V	22,2 V	20,6 V	22,2 V	20,6 V	22,2 V	20,6 V
Maximum Power Current (Imp)	11,28 A	9,11 A	11,28 A	9,11 A	11,51 A	9,30 A	11,73A	9,48 A	11,96 A	9,66 A
Open-circuit Voltage (Voc)	25,6 V	24,1 V	25,6 V	24,1 V	25,6 V	24,1 V	25, 6 V	24,1 V	25,6 V	24,1 V
Short-circuit Current (Isc)	12,19 A	9,84 A	12,19 A	9,84 A	12,43 A	10,04 A	12,67 A	10 24 A	12,92 A	10,43 A
Module Efficiency STC (%)	12,1	7 %	12,42	2 %	12,67	%	12,92	2 %	13,17	7 %
Operating Temperature(°C)		-0,4°C~+85°C								
Maximum system voltage	1000/1500 VDC (IEC)									
Maximum series fuse rating					25 A					
Power tolerance	0~+3 %									
Temperature coefficient of Pm	-0,29 %/°C									
Temperature coefficient of Vo	emperature coefficient of Voc -0,25 %/°C									
Temperature coefficient of lsc	-0,045 %/°C									
Nominal operating cell temperature (NOCT) 45±2°C										
*STC: 🌞 Irradiance 10	00 W/m <sup>2</sup>	🚺 Ce	II Tempero	ature 25°0	C	AN	∧=1.5			
NOCT: 🎬 Irradiance 800 W/m² 🛛 🕼 Ambient Temperature 20°C 🧼 AM=1.5 🌱 Wind Speed 1 m/s										

\* Power measurement tolerance: ±3 %

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\* The parameters of BIPV product are determined according to detailed customization information, the datasheet is just for your reference.

Specifications included in this datasheet are subject to change without notice for product improvement.

#### Electrical Performance & Temperature Dependence



Mechanical C	Characteristics
Cell Type	Monocystalline N-Type
No. of cells	72 (8×9)
Dimensions	1750×1150×11,5mm (68,90×45.27×0,45 inch)
Weight	54,61 kg (120,39 lbs)
Front/Black Glass	5,0 mm+5,0 mm tempered glass
Transmittance	30%-40%
Junction Box	IP68 Rated
Output Cables	TUV 1×4.0mm <sup>+</sup> (+): 400mm , (-): 200mm or Customized Length



Low Voltage LFP Battery





#### LONG LIFESPAN

10 years comprehensive warranty with more than 6000 life cycles



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#### **UNIQUE SAFETY**

Ingression protection class of IP65 for flexilble indoor and outdoor installation



#### PREMIUM SERVICE

Local-based support available 24/7

#### EXTREME RELIABILITY

Full protections including cell, pack, and communication modules

#### QUICK INSTALLATION

Plug-and-Play connection for 40% less installation time



 $(\bigtriangleup)$ 

(17)

#### **ALL-IN-ONE SOLLUTION**

PV+ESS solution for packed warranty and one-stop service and support



#### **SPECIFICATIONS**

Battery Pack		JKS-B5	100-GI	
Datasheet	JKS-B51100-GI	JKS-B51200-GI	JKS-B51300-GI	JKS-B51400-GI
System Demo		 		
Battery Module		JKS-B51100-GI (5.12	kWh, 51.2V, 58kg)	
Number of Modules	1	2	3	4
Energy Capacity	5.12kWh	10.24kWh	15.36kWh	20.48kWh
Usable Capacity	4.6kWh	9.36kWh	13.82kWh	18.43kWh
Dimension (W/D/H) <sup>1</sup>	660/210/410mm	660/210/810mm	660/210/1210mm	660/210/1610mm
Weight	58kg	116kg	174kg	232kg
Rated Charging/ Discharging Power	2.56kW	4.86kW	4.86kW	4.86kW
Max. Charging/ Discharging Power <sup>1</sup>	4.86kW	4.86kW	4.86kW	4.86kW
Max. Charging/ Discharging Current <sup>2</sup>	95A	95A	95A	95A
GENERAL SPECIFICATION				
Battery Type		Cobalt Free Lithium	Iron Phosphate (LFP)	
Nominal Voltage		51	.2V	
Operating Voltage Range		44.8	~ 58.4V	
IP Protection		IF	965	
Installation		Wall-n	nounted	
Operation Temperature		-30°C	~ 60°C	
FEATURES				
Communication Port		CAN,	RS485	
Warranty		10	Years	
CERTIFICATION				
Cell Certificates		UL1642, IEC62133	5, IEC62619, UN38.3	
Pack Certificates		IEC6261	9, UN38.3	

<sup>1</sup> The suggested charging temperature is -20°C - 50°C, whereas the suggested discharging temperature is 0°C - 50°C. <sup>2</sup> Recommended Charging/Discharging rate at 0.5C.

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## JKR-B1250~2750-A

#### High Voltage LFP Battery



#### 

#### LONG LIFESPAN

6,000 cycles backed by Jinkosolar 10-years authoritive warranty



#### **QUICK INSTALLATION**

No cable between packs design and support direct parallel connection



Multiple battery protections and cell-level anti-fire design to ensure entire safety

#### **CIRCUIT DIAGRAM**



Maximum 7 packs stackable, up to 26.88kWh



#### **EXPANDABLE CAPACITY**

Max parallel number is 5 racks, up to 134.4kWh



#### STRONG STABILITY

Protection rating at IP65 to enlarge the application scenario

#### **SPECIFICATIONS**

Solar

Model J	IKR-B1250-A	JKR-B1650-A	JKR-B2050-A	JKR-B2450-A	JKR-B2750-A
Nominal Battery Energy (kWh)	11.52	15.36	19.20	23.04	26.88
Module Number	3	4	5	6	7
Nominal Voltage(V)	230.4	307.2	384	460.8	537.6
Nominal charge and discharge current (A	)		25		
Maximum charge and discharge current(A	۹)		45		
Nominal charge and discharge power(kW)	5.76	7.68	9.60	11.52	13.44
Nominal Capacity (Ah)			50		
Maximum Continuous Discharge Power(k	w) 10.368	13.824	17.28	20.736	24.192
Maximum Continuous Charge Power (kw	/) 10.368	13.824	17.28	20.736	24.192
Charging Temp. Range(C)			0~55		
Discharging Temp. Range(C)			-20~+60		
Net Weight (kg)	124.5	161	197.5	234	270.5
Dimension[W*D*H]	610*460*754	610*460*908	610*460*1062	610*460*1216	610*460*1370
Calendar Life			>5000 Cycles		
Warranty			10 years		
Protection Level			IP65		
Alarms		Over charge/Over discha	arge/Over current/Over t	emperature/Short Circ	cuit
Battery Module Type			lithium battery		
Certification		IEC 62619:2022/IEC 63056 61000-6-1/EN/IEC 61000-6	5-2020/IEC 60730 Anne 5-3/VDE AR-E-2510-50/I	x H/IEC/EN62477-1/EN JL 1973/ U L9540A/UN	I/IEC 1 38.3

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**SPECIFICATIONS** 



JKS10.2K-5HLVS storage system comes with a hybrid inverter and modular batteries.. It utilizes LFP battery technology, a robust battery management system for safe operation, and a 10-year warranty for battery. It can be paired with any existing solar array. An integrated automatic transfer switch and autotransformer enables seamless operation during power outage events when paired with solar. With top safety for self-protection, it is certified by extensive safety standards.IEC62619, IEC62040, EN61000, UN38.3, NRS 097.



The inverter can connect to a PV input of up to 6 kW DC over two MPPT channels and is available in both grid and off-grid switch functions



Double leakage current and isolation protection, multi-stage protection scheme ensures higher safety

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Built-in DC/AC safety isolation system, easier for transportation and installation

Compact and thin with minimalist exterior

production

design

(...)

C

The smart real-time monitoring app is available

for both installers and end-users to track system

Natural convection, wider operating temperature range of -20 to +55 degrees Celsius

#### **CIRCUIT DIAGRAM**



Model		JKS10.2K-5HLVS
System Capacity		5kW/10kWh
PV String Input	Max. DC input power (W)	6000
	Max. DC Input voltage & nominal voltage(V)	580 & 360
	Startup voltage & MPPT voltage range(V)	90 & 125-550
	Number of MPPT	2
	Max. input current per MPPT(A)	13
	Max. short-circuit current per MPPT(A)	14
Battery Input	Battery type	LFP (LiFePO4)
	Nominal battery voltage(V)	51.2
	Charging Voltage range (V)	44.8-57.6
	Max. charging current & discharging current(A)	70 & 100
	Battery capacity (Ah)	100Ah*2
	Energy capacity (kWh)	5.12kWh*2
	Usable capacity (kWh)	9.216
AC Output (Grid)	Nominal AC output power (W)	5000
	Nominal AC voltage & AC grid frequency	230Vac & 50/60Hz±5Hz
	Rated output current(A)	22.8
	Power factor ( $cos\Phi$ )	0.8leading-0.8lagging
AC Output (Backup)	Max. output power(W)	4600W(4800W 5min; 6000W 5sec)
	Nominal AC voltage & AC grid frequency	230Vac & 50/60Hz±5Hz
	Rated output current(A)	20.9
Efficiency	Max. PV efficiency	97.8%
	Euro. PV efficiency	97%
Protection	Anti-islanding protection	Yes
	Output over current	Yes
	DC reverse polarity protection	Ves
	String fault detection	Ves
	AC/DC surge protection	
	Insulation detection	Yes
	AC short circuit protection	Ves
General Specifications	Dimensions W x D x H	623*170*1843mm
	Cabinet weight	52kg
	Inverter weight	28kg
	Packs weight	88kg
	*Operating temperature range	-20 °C ~+55 °C
	Noise level	<30dB
	Cooling type	Natural Cnvection
	Operation altitude	≤ 2000m
	Operation humidity	0%~95% RH
	Ingress protection class	IP65(Inverter & battery cabinet)
	Warranty	5 years (inverter)/10 years (battery)
	Communication	RS485/CAN2 0/M/IFI
	Display	APD
	Contification & standard	

\* For charging operation: 0  $^\circ$  C +55  $^\circ$  C, for discharging operation: -20  $^\circ$  +55  $^\circ$ 

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## **SUNGIGA**



#### JKS-215KLAA-100PLAA Liquid Cooling Energy Storage System

Jinko liquid-cooling C&I product integrates packs, BMS, PCS et al to provide customer with all-in-one 1000V ESS solution. The product can be widely used in various scenarios such as peak & valley arbitrage, backup power, maximizing self-consumption et al.



#### **HIGHLY INTEGRATED**

#### **RELIABLE AND SAFE**

- High energy-density system with capacity of 215kWh.
- □ Intelligent monitoring and linkage action ensures system safety
- Module design, easy to expand 🔲 Integrated heating system for thermal safety and enhanced performance and reliability

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- **EFFICIENT AND FLEXIBLE**
- $\Box$  The turnkey system is design to  $\Box$ enhance higher efficiency and longer service life
- □ Highly integrated ESS for easy shipping and flexible O&M

#### Multiple operation modes are available, the software can be customized and upgraded

**SMART SOFTWARE** 

- Cloud monitoring and operation
  - platform supports the real time monitoring, ensuring highly efficient commission

#### **APPLICATION**

#### ( , PEAK SHAVING Optimize power consumption with

battery energy storage systems

#### OPTIMIZATION THE USE OF **RENEWABLE ENERGY**

Maximizes the use of PV and the excess power can be stored for using at night

#### (4) ENERGY BACKUP

Supply power to facilities when the grid is down, or apply in areas without

power.

#### ARBITRAGE

Carry out arbitrage by using peak and valley electricity prices in different time periods.

#### CAPACITY FIRMING

Smoothing the indeterminacy of renewables energy by storing and dispatching when needed.

#### COST SAVING

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Discharge during peak demand to reduce expensive demand charges



#### **DC** Parameter

Cell type	LFP-3.2V/280Ah
Max. charging/discharging Power	0.5P
Rated capacity	215kWh
Rated voltage	768V
Voltage range	672V~864V
Cooling method	Liquid cooling
AC Parameter	
Rated output power	100kW
AC voltage	400Vac
Rated grid frequency	50/60Hz
Total current waveform distortion rate	<3%
Cooling method	Intelligent forced air co
System Parameter	
Operating temperature	20oC~ 50oC

Operating temperature	20oC~ 5
range Humidity	≤95%RH, non-0
Working altitude	≤2000
Protection level	IP54
Fire Fighting Media	Novec 1
Anti-corrosion grade	C3
Dimension(W×D×H)	1300x1300x2
Communication Interface	RS485/CAN/

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cooling

condensing m 1230

2300mm /Ethernet

## **SUNTERA**



## JKS-3440AL

Liquid Cooling Energy Storage System



JKS3440AL is a fully integrated, scalable, turnkey energy storage system for C&I and utility applications. Utilizing LFP battery technology that comes with a BMS, liquid cooling, fire suppression, smoke & temperature sensor, off-gas detection, deflagration venting, water dry pipe, it safeguards the overall safety and prolongs the system life. The idustry leading high energy density enables its containerize capacity up to 3.44MWh in a 20'container. The ESS is all backed by JinkoSolar as a single point of contact for contracting, delivery, warranty and service.

#### **EFFECTIVE LIQUID COOLING**



Five liquid cooling control modes and auxiliary power consumption decrease by 20%

#### **HIGHER SAFETY**



Multiple level protection from cell to system to prevent from uncontrolled heat spread



#### **HIGHER EFFICIENCY**



Cell to Cell active balance ensures the consistency (~<u>E</u>) between cells

#### **INTELLIGENT O&M**



Smart management and real time monitoring ensures high efficient commission



Compact design with side-by-side layout and standard 20ft container design ensures 6.88mwh/40ft



**ESS** in Power Generation



#### ESS in Power Transmission and Distribution

Release existing transmission capacity and relieve network peak load

#### ESS in Power Consumption



Supplement to the electricity supply, reducing the cost and ensuring the stable power network

#### Items

Type of cell	
Cell	
Max. charge/discharge power	
Battery combination mode	
Rated capacity	
Rated voltage	
Voltage range	
Cooling method	
Environmental temperature	
Environmental humidity	
Altitude	≤ 20
Noise level	
IP Grade	
Storage temperature	
Corrosion-proof grade	C3 (E
Fire protection	Gas Sensors+Deflagration
External communication interface	
Dimensions (L×W×H)	
Weight	

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#### Parameters

Lithium Iron Phosphate(L	.FP)
--------------------------	------

3.2V/280Ah

0.5P

1P384S×10

3.44 MWh

1228.8V

1075.2~1382.4V

Liquid Cooling

-20~50℃

≤95%RH, Non condensation

000m / <4000m (optional, derating)

< 80dB(A), @1m

IP54

-20~45℃

N ISO 12944)/C4 (optinal)/C5(optinal)

Venting + FM 200/Novec 1230/ Aerosol + Water Dry Pipe

Ethernet/Fiber (Optinal)

6058×2438×2896mm

≈35000 kg