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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 fourth 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.

- **25 World Records**
- **2000+ R&D Team**
- **Number of 1702 Patents**
- **R&D investment in 2022 5.615 Billion RMB**

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.

[Bar chart showing R&D investment from 2012 to 2022]

Robust Quality Certified

Awarded the “Quality China” award by TÜV 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”

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.

The Most bankable solar module manufacturers by BloombergNEF

- **2012**
- **2014**
- **2016**
- **2018**
- **2020**
- **2022**

BloombergNEF

Highest rating in PV ModuleTech

*The report will be published every two years since 2012 and annually since 2016*
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.

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 coefficient is better than PERC (0.9% improvement on average)
- 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.

- P-type combined power = P frontal*(1+BSI*Bifi)

PERC: BSI*Bifi (70%)~9.45%
TOPCon: BSI*Bifi (85%)~11.48%

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 conductivity, 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 prospect in the near future.

HOT 2.0 Technology

- Cell efi. world record: Passivation 32.33%
- Mass production Cell efi.: P+ diffusion 25.6%
- Silicon substrate
- Tunneling layer
- N+ diffusion
- Passivation

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

Bifacial technology brings more power generation

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

Practical Yield Gain:

<table>
<thead>
<tr>
<th>Location</th>
<th>Test Performer</th>
<th>Types of Ground</th>
<th>Type of Installation</th>
<th>Module Type</th>
<th>Test Type</th>
<th>Test Duration</th>
<th>Bifacial Gain</th>
</tr>
</thead>
<tbody>
<tr>
<td>Ningbo, China</td>
<td>CPVT</td>
<td>Grass</td>
<td>Fixed</td>
<td>182-72N-Dual Glass 182-72P-Dual Glass</td>
<td>String</td>
<td>2022.9.01 - 2023.9.30</td>
<td>5.17%</td>
</tr>
<tr>
<td>Zhangbei, China</td>
<td>CCC</td>
<td>Glass</td>
<td>Tracker</td>
<td>182-72N-Dual Glass 182-72P-Dual Glass</td>
<td>String</td>
<td>2022.7.11 - 2023.9.30</td>
<td>4.80%</td>
</tr>
<tr>
<td>Ningbo, China</td>
<td>CAS</td>
<td>Cement</td>
<td>Tracker</td>
<td>182-72N-Dual Glass 182-72P-Dual Glass</td>
<td>String</td>
<td>2022.6.26 - 2023.9.30</td>
<td>4.65%</td>
</tr>
<tr>
<td>Hainan, China</td>
<td>SGC</td>
<td>Cement</td>
<td>Fixed</td>
<td>182-72N-Dual Glass 182-72P-Dual Glass</td>
<td>String</td>
<td>2022.8.01 - 2023.9.30</td>
<td>4.20%</td>
</tr>
<tr>
<td>Malaysia</td>
<td>TUV Nord</td>
<td>Sand</td>
<td>Fixed</td>
<td>182-72N-Dual Glass 182-72P-Dual Glass 210-72P-Dual Glass</td>
<td>Module</td>
<td>2022.12.01 - 2023.3.31</td>
<td>6.67%</td>
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Customer Benefits

SMBB Technology
Hot 2.0 Technology
Higher Lifetime Power Yield

Saving BOS Cost
Higher power output
Severe Weather Resilience

Low-light Performance
Durability Against Extreme Environmental Conditions
High Efficiency

<table>
<thead>
<tr>
<th>Product</th>
<th># of cells</th>
<th>Size/Weight</th>
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<tbody>
<tr>
<td>JK0M56-585N-72HL4-14V</td>
<td>144 cells</td>
<td>2278×1134×35mm / 28.0kg</td>
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<tr>
<td>JK0M60-580N-72HL4-80V</td>
<td>144 cells</td>
<td>2278×1134×30mm / 32.8kg</td>
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<tr>
<td>JK0M60-620N-66HL4-80V</td>
<td>132 cells</td>
<td>2382×1134×30mm / 33.4kg</td>
</tr>
<tr>
<td>JK0M61-635N-78HL4-80V</td>
<td>156 cells</td>
<td>2465×1134×30mm / 34.6kg</td>
</tr>
</tbody>
</table>
Tiger Neo N-type
72HL4-(V)
565-585 Watt
MONO-FACIAL MODULE

N-Type
Positive power tolerance of 0 to 1.3%

Key Features
- Hot 2.0 Technology
  - The module’s power output is increased by 2.0% compared to the baseline model.
- Enhanced Mechanical Load
  - Certified to withstand wind load (2400 Pascal) and snow load (3400 Pascal).

SPECIFICATIONS

<table>
<thead>
<tr>
<th>Module Type</th>
<th>JKM557N-72HL4</th>
<th>JKM557N-72HL4</th>
<th>JKM557N-72HL4</th>
<th>JKM557N-72HL4</th>
<th>JKM557N-72HL4</th>
<th>JKM557N-72HL4</th>
<th>JKM557N-72HL4</th>
</tr>
</thead>
<tbody>
<tr>
<td>Maximum Power Voltage (MPPT)</td>
<td>41.4 V</td>
<td>41.2 V</td>
<td>41.2 V</td>
<td>41.4 V</td>
<td>41.2 V</td>
<td>41.4 V</td>
<td>41.4 V</td>
</tr>
<tr>
<td>Maximum Power Voltage (Line)</td>
<td>41.4 V</td>
<td>41.2 V</td>
<td>41.2 V</td>
<td>41.4 V</td>
<td>41.2 V</td>
<td>41.4 V</td>
<td>41.4 V</td>
</tr>
<tr>
<td>Operating Voltage (Std)</td>
<td>41.4 V</td>
<td>41.4 V</td>
<td>41.4 V</td>
<td>41.4 V</td>
<td>41.4 V</td>
<td>41.4 V</td>
<td>41.4 V</td>
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<tr>
<td>Short-circuit Current (Std)</td>
<td>14.0 A</td>
<td>14.0 A</td>
<td>14.0 A</td>
<td>14.0 A</td>
<td>14.0 A</td>
<td>14.0 A</td>
<td>14.0 A</td>
</tr>
<tr>
<td>Module Efficiency (IEC)</td>
<td>22.0%</td>
<td>22.0%</td>
<td>22.0%</td>
<td>22.0%</td>
<td>22.0%</td>
<td>22.0%</td>
<td>22.0%</td>
</tr>
<tr>
<td>Operating Temperature (°C)</td>
<td>-40°C to +60°C</td>
<td>-40°C to +60°C</td>
<td>-40°C to +60°C</td>
<td>-40°C to +60°C</td>
<td>-40°C to +60°C</td>
<td>-40°C to +60°C</td>
<td>-40°C to +60°C</td>
</tr>
</tbody>
</table>

Linear Performance Warranty
- 12 Year Product Warranty
- 30 Year Linear Power Warranty
- 0.40% Annual Degradation Over 30 years
Tiger Neo N-type
72HL4-BDV
560-580 Watt
BIFACIAL MODULE WITH DUAL GLASS

N-Type
Positive power tolerance of 0±3%

Key Features
- SMBB Technology
  Better light trapping and current collection to improve module power output and reliability.
- PID Resistance
  Excellent Anti-PID performance guarantee via optimized mass-production process and materials control.
- Higher Power Output
  Module power increases 5-25% generally, bringing significantly lower LCOE and higher BHR.

HOT 2.0 Technology
The N-type module with HOT 2.0 technology has better reliability and lower LCOE.

Enhanced Mechanical Load
Certificates to withstand wind load (2400 Pascale) and snow load (4000 Pascale).

Packaging Configuration
Two modules in one stock, 720mm X 480mm / 480mm X 200mm or Customized Length.

SPECIFICATIONS
<table>
<thead>
<tr>
<th>Module Type</th>
<th>JKM360M27X-BDV</th>
<th>JKM375M27X-BDV</th>
<th>JKM405M27X-BDV</th>
<th>JKM360M27K-BDV</th>
<th>JKM375M27K-BDV</th>
<th>JKM405M27K-BDV</th>
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<tbody>
<tr>
<td>STC</td>
<td>NOCT</td>
<td>STC</td>
<td>NOCT</td>
<td>STC</td>
<td>NOCT</td>
<td>STC</td>
</tr>
<tr>
<td>Maximum Power Voltage (Vmp)</td>
<td>41.95V</td>
<td>39.39V</td>
<td>42.13V</td>
<td>39.52V</td>
<td>42.29V</td>
<td>39.65V</td>
</tr>
<tr>
<td>Dissipated Voltage ( Voc )</td>
<td>50.67V</td>
<td>48.13V</td>
<td>50.87V</td>
<td>48.32V</td>
<td>51.07V</td>
<td>48.51V</td>
</tr>
<tr>
<td>Stabilized Current ( Isc )</td>
<td>14.75A</td>
<td>11.46A</td>
<td>14.79A</td>
<td>11.60A</td>
<td>14.75A</td>
<td>11.70A</td>
</tr>
<tr>
<td>Module Efficiency STC (%)</td>
<td>21.68%</td>
<td>21.67%</td>
<td>21.67%</td>
<td>22.20%</td>
<td>22.45%</td>
<td></td>
</tr>
<tr>
<td>Operating Temperature(°C)</td>
<td>-40°C~+40°C</td>
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<td></td>
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<td></td>
<td></td>
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<tr>
<td>Maximum system voltage</td>
<td>1000VDC (30V)</td>
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<td></td>
<td></td>
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<tr>
<td>Maximum series fuse rating</td>
<td>36V</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Powerolerance</td>
<td>0±3%</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Temperature coefficient of Pmax</td>
<td>-0.29%/°C</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Temperature coefficient of Voc</td>
<td>-0.29%/°C</td>
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<td></td>
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<td></td>
<td></td>
</tr>
<tr>
<td>Temperature coefficient of Isc</td>
<td>0.04%/°C</td>
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<td></td>
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<tr>
<td>Nominal operating cell temperature (NOCT)</td>
<td>45°C</td>
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</tr>
<tr>
<td>Refer, Insulation Factor</td>
<td>60x5%</td>
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<td></td>
<td></td>
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</tbody>
</table>

BI FACIAL OUTPUT-REAR SIDE POWER GAIN

<table>
<thead>
<tr>
<th>%</th>
<th>Maximum Power (Pmax)</th>
<th>Module Efficiency STC (%)</th>
<th>Module Efficiency STC (%)</th>
<th>Module Efficiency STC (%)</th>
</tr>
</thead>
<tbody>
<tr>
<td>5%</td>
<td>565Wp</td>
<td>23.77%</td>
<td>22.07%</td>
<td>23.37%</td>
</tr>
<tr>
<td>10%</td>
<td>640Wp</td>
<td>25.13%</td>
<td>23.73%</td>
<td>24.40%</td>
</tr>
<tr>
<td>20%</td>
<td>705Wp</td>
<td>27.10%</td>
<td>25.78%</td>
<td>27.92%</td>
</tr>
</tbody>
</table>

*STC: Irradiance 1000W/m², Cell Temperature 25°C
NOCT: Irradiance 800W/m², Ambient Temperature 20°C
Wind Speed 1m/s

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Specifications included in this dataset are subject to change without notice.
Tiger Neo N-type 66HL4M-BDV 600-620 Watt BIFACIAL MODULE WITH DUAL GLASS

N-Type
Positive power tolerance of 0±3%

ISO9001:2015: Quality Management System
ISO14001:2015: Environment Management System
ISO45001:2018: Occupational health and safety management systems

Key Features

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

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

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

**Enhanced Mechanical Load**
Certified to withstand wind load (5400 Pascale) and snow load (3400 Pascale).

**HOT 2.0 Technology**
The N-type module with HOT 2.0 technology has better reliability and lower LID/RIS.

**LINEAR PERFORMANCE WARRANTY**
- 12 Year Product Warranty
- 30 Year Linear Power Warranty
- 0.40% Annual Degradation Over 30 years
Tiger Neo N-type 78HL4-BDV
615-635 Watt
BIFACIAL MODULE WITH DUAL GLASS

N-Type
Positive power tolerance of 0±3%

Key Features

- **SMBB Technology**
  Better light trapping and current collection to improve module power output and reliability.

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

- **Higher Power Output**
  Module power increases 3-5% generally, bringing significantly lower LCOE and higher BPT.

**HOT 2.0 Technology**

The N-Type module with Hot 2.0 technology has better reliability and lower LCOE (LCC).

**Enhanced Mechanical Load**

Certified to withstand wind load (2400 Pascale) and snow load (3400 Pascale).

**LINEAR PERFORMANCE WARRANTY**

- **12 Year Product Warranty**
- **30 Year Linear Power Warranty**
- **0.40% Annual Degradation Over 30 years**

**SPECIFICATIONS**

- **Module Type:** JKM615K3T-BDV, JKM635K3T-BDV
- **Maximum Power (Pmax):**
  - 615Wp
  - 635Wp
- **Maximum Power Voltage (Vmp):**
  - 45.7V
  - 45.9V
- **Maximum Power Current (Imp):**
  - 13.44A
  - 13.64A
- **Operating Voltage (Voc):**
  - 55.4V
  - 55.8V
- **Efficiency (STC [%]):**
  - 14.14%
  - 14.13%
- **Operating Temperature (℃):**
  - 40°C
- **Maximum system voltage:**
  - 1060VDC (BDC)
- **Maximum fuse rating:**
  - 30A
- **Power tolerance:**
  - 0±3.5%
- **Temperature coefficients of Pmax:**
  - -0.39%/℃
- **Temperature coefficients of Voc:**
  - -0.34%/℃
- **Non-_operating cell temperature (NOCT):**
  - 45°C
- **Reference Bifacial Factor:**
  - 80%

**BIFACIAL OUTPUT-REAR SIDE POWER GAIN**

<table>
<thead>
<tr>
<th>Percentage</th>
<th>Maximum Power (Pmax)</th>
<th>2%</th>
<th>5%</th>
<th>10%</th>
<th>15%</th>
<th>20%</th>
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</thead>
<tbody>
<tr>
<td>6%</td>
<td>640Wp</td>
<td>23.10%</td>
<td>25.48%</td>
<td>23.66%</td>
<td>22.85%</td>
<td></td>
</tr>
<tr>
<td>616Wp</td>
<td>23.10%</td>
<td>25.48%</td>
<td>23.66%</td>
<td>22.85%</td>
<td></td>
<td></td>
</tr>
<tr>
<td>635Wp</td>
<td>25.50%</td>
<td>25.51%</td>
<td>25.71%</td>
<td>25.92%</td>
<td>26.13%</td>
<td></td>
</tr>
<tr>
<td>700Wp</td>
<td>25.50%</td>
<td>25.51%</td>
<td>25.71%</td>
<td>25.92%</td>
<td>26.13%</td>
<td></td>
</tr>
<tr>
<td>750Wp</td>
<td>27.50%</td>
<td>27.73%</td>
<td>27.95%</td>
<td>28.17%</td>
<td>28.40%</td>
<td></td>
</tr>
</tbody>
</table>

**STC:**
- **Irradiance:** 1000W/m²
- **Cell Temperature:** 25°C
- **AM:** 1.5

**NOCT:**
- **Irradiance:** 800W/m²
- **Ambient Temperature:** 20°C
- **AM:** 1.5
- **Wind Speed:** 1m/s

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Specifications indicated in this datasheet are subject to change without notice.
Complements 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

Customer Benefits

- Multi Busbar
- PID Resistance
- Higher Lifetime Power Yield

- 1500V
- Saving BOS Cost
- Higher power output
- Severe Weather Resilience

- Low-light Performance
- Durability Against Extreme Environmental Conditions
- High Efficiency

<table>
<thead>
<tr>
<th>Product</th>
<th># of cells</th>
<th>Size/Weight</th>
</tr>
</thead>
<tbody>
<tr>
<td>JKM540-560M-72HL4-(V)</td>
<td>72 Cells</td>
<td>2278×1134×35mm / 28.0kg</td>
</tr>
<tr>
<td>JKM535-555M-72HL4-BDVP</td>
<td>78 Cells</td>
<td>2278×1134×30mm / 32.0kg</td>
</tr>
</tbody>
</table>
Tiger Pro 72HC
540-560 Watt
MONO-FACIAL MODULE

Positive power tolerance of 0~+3%

Guaranteed Power Performance

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

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

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

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

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

Linear Performance Warranty

12 Year Product Warranty
25 Year Linear Power Warranty
0.55% Annual Degradation Over 25 years

Additional value from Jinko Solar’s linear warranty

M&B HC Technology

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Specifications included in this datasheet are subject to change without notice.
Tiger Pro 72HC-BDVP
535-555 Watt
BIFACIAL MODULE WITH DUAL GLASS

P-Type

Positive power tolerance of 0~+3%

ISO14001:2015: Environment Management System
ISO9001:2015: Quality Management System
IEC61215(2016), IEC61730(2016)

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

PID Resistance
Excellent Anti-PID performance guarantee via multi-busbar Technology and improved material control.

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

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

Multi Busbar Technology
Anodized Aluminium Alloy

KEY FEATURES

- Positive power tolerance of 0~+3%
- PID Resistance
- Enhanced Mechanical Load
- Higher Power Output
- Multi Busbar Technology

Key Features

12 Year Product Warranty
0.45% Annual Degradation Over 30 years
30 Year Linear Power Warranty

Bifacial Technology

Specifications:

- Module Type: JK535M-72HL4-BDVP
- Nominal Power: 535Wp
- Maximum Power Voltage: 40.94V
- Maximum Power Current: 13.83A
- Open-circuit Voltage: 49.54V
- Module Efficiency STC (%): 19.31%
- Temperature Coefficients of Isc (%/°C): -0.28%
- Temperature Coefficients of Voc (%/°C): -0.35%
- Temperature Coefficients of Pmax (%/°C): -0.25%
- Operating Temperature (°C): -40°C to +85°C
- Maximum system voltage: 1080VDC (STC)
- Maximum series fuse rating: 30A
- Power Tolerance: 0~+3%
- Nominal operating cell temperature (NOCT): 45±2°C

BIFACIAL OUTPUT-REAR SIDE POWER GAIN

<table>
<thead>
<tr>
<th>5%</th>
<th>Maximum Power (Wp)</th>
<th>Module Efficiency STC (%)</th>
<th>10%</th>
<th>Maximum Power (Wp)</th>
<th>Module Efficiency STC (%)</th>
<th>20%</th>
<th>Maximum Power (Wp)</th>
<th>Module Efficiency STC (%)</th>
</tr>
</thead>
<tbody>
<tr>
<td>619Wp</td>
<td>23.81%</td>
<td>24.04%</td>
<td>623Wp</td>
<td>24.27%</td>
<td>24.50%</td>
<td>632Wp</td>
<td>24.70%</td>
<td>25.00%</td>
</tr>
<tr>
<td>668Wp</td>
<td>26.90%</td>
<td>27.13%</td>
<td>675Wp</td>
<td>26.36%</td>
<td>26.63%</td>
<td>688Wp</td>
<td>26.63%</td>
<td>26.90%</td>
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</table>

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BIPV Introduction

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

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

- Abundant color options
  Rich colors, more in line with modern architectural aesthetics;

- High freedom of style
  The size, shape and power can be customized according to the customer’s demand and its application area;

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

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

Intelligent Optimized Chip

- Shade free
- Increase power generation by more than 2%
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  

**PV Color Steel Tile System**  
360-380 Watt  

**Standard & Certificate**  
- IEC61215(2016)  
- GB 8624  
- GB60071.5 2015, Quality Management System  
- ISO 14001:2015, Environment Management System  
- EN 3001-1  
- SGS 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  
- **Strong safety**  
  Double layers of tempered glass with class A of fireproofing leads to better wind load, heat resistance and frost resistance  
- **High efficiency**  
  Higher-density cell arrangement can put more cells per unit area and achieve higher efficiency  
- **Dual function**  
  Replacing conventional building envelope materials, with functions of building skin and power generator  
- **Architectural design element**  
  Inherent advantages of integration in module design  

**SPECIFICATIONS**  

<table>
<thead>
<tr>
<th>Module Type</th>
<th>JKS355N-48HLA-BDV</th>
<th>JKS360N-48HLA-BDV</th>
<th>JKS355N-48HLA-BDV</th>
<th>JKS370N-48HLA-BDV</th>
<th>JKS373N-48HLA-BDV</th>
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</thead>
<tbody>
<tr>
<td>Maximum Power (Pmax) (Watt)</td>
<td>355W</td>
<td>360W</td>
<td>355W</td>
<td>370W</td>
<td>373W</td>
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<td>Maximum Power Voltage (Vmp)</td>
<td>26.60V</td>
<td>26.49V</td>
<td>26.60V</td>
<td>26.60V</td>
<td>26.60V</td>
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<td>Maximum Power Current (Imp)</td>
<td>12.73A</td>
<td>10.22A</td>
<td>12.82A</td>
<td>10.28A</td>
<td>12.91A</td>
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<tr>
<td>Open-circuit Voltage (Voc)</td>
<td>39.97V</td>
<td>30.27V</td>
<td>34.06V</td>
<td>32.35V</td>
<td>34.23V</td>
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<tr>
<td>Short-circuit Current (Isc)</td>
<td>13.83A</td>
<td>10.83A</td>
<td>13.48A</td>
<td>10.84A</td>
<td>13.90A</td>
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<tr>
<td>Module Efficiency STC (%)</td>
<td>20.63%</td>
<td>20.92%</td>
<td>21.20%</td>
<td>21.49%</td>
<td>21.61%</td>
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<tr>
<td>Operating Temperature (°C)</td>
<td>-40°C ~ +80°C</td>
<td>-40°C ~ +80°C</td>
<td>-40°C ~ +80°C</td>
<td>-40°C ~ +80°C</td>
<td>-40°C ~ +80°C</td>
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<td>Power Tolerance</td>
<td>0% ~ 3%</td>
<td>0% ~ 3%</td>
<td>0% ~ 3%</td>
<td>0% ~ 3%</td>
<td>0% ~ 3%</td>
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<tr>
<td>Temperature Coefficient of Pmax</td>
<td>-0.2%/°C</td>
<td>-0.2%/°C</td>
<td>-0.2%/°C</td>
<td>-0.2%/°C</td>
<td>-0.2%/°C</td>
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<tr>
<td>Temperature Coefficient of Voc</td>
<td>-0.2%/°C</td>
<td>-0.2%/°C</td>
<td>-0.2%/°C</td>
<td>-0.2%/°C</td>
<td>-0.2%/°C</td>
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<td>Temperature Coefficient of Isc</td>
<td>0.04%/°C</td>
<td>0.04%/°C</td>
<td>0.04%/°C</td>
<td>0.04%/°C</td>
<td>0.04%/°C</td>
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**Mechanical Characteristics**  
- **Thickness of Color Steel**: 0.6mm  
- **Strength of Color Steel**: ≥234MPa  
- **Thickness of Coating**: ≥135μm²  
- **Cell Type**: N-Type Cell  
- **Number of Half-cells**: 96 (8x12)  
- **Dimensions**: 1272×1275×5mm  
- **Junction Box**: IP68 Rated  
- **Output Cables**: 12V ±4V², or Customized Length  
- **Weight**: 20 kg  
- **Package**: 10×4×820mm, 440pcs/40HQ Container  

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All-Red BIPV 180-200 Watt
Building Integrated PV

Positive power tolerance of 0~+3%

IC61215(2016), IC61730(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.

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

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

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

A Wide Range of Colors
A rich palette of colors that fits different architectural styles.

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

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

*For detailed warranty information, please refer to our BIPV warranty document.

SPECIFICATIONS

<table>
<thead>
<tr>
<th>Module Type</th>
<th>JKR160H+4HL+40D+E10</th>
<th>JKR180H+4HL+40D+E10</th>
<th>JKR200H+4HL+40D+E10</th>
<th>JKR230H+4HL+40D+E10</th>
<th>JKR250H+4HL+40D+E10</th>
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<table>
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<tr>
<th></th>
<th>STC</th>
<th>NOCT</th>
<th>STC</th>
<th>NOCT</th>
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<th>NOCT</th>
<th>STC</th>
<th>NOCT</th>
<th>STC</th>
<th>NOCT</th>
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</thead>
<tbody>
<tr>
<td>Maximum Power Voltage (Vmp)</td>
<td>33.0 V</td>
<td>30.7 V</td>
<td>33.0 V</td>
<td>30.7 V</td>
<td>33.0 V</td>
<td>30.7 V</td>
<td>33.0 V</td>
<td>30.7 V</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Maximum Power Current (Imp)</td>
<td>5.45 A</td>
<td>4.40 A</td>
<td>5.60 A</td>
<td>4.33 A</td>
<td>5.75 A</td>
<td>4.65 A</td>
<td>5.91 A</td>
<td>4.77 A</td>
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<tr>
<td>Open-circuit Voltage (Voc)</td>
<td>38.5 V</td>
<td>36.2 V</td>
<td>38.5 V</td>
<td>36.2 V</td>
<td>38.5 V</td>
<td>36.2 V</td>
<td>38.5 V</td>
<td>36.2 V</td>
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<tr>
<td>Short-circuit Current (Isc)</td>
<td>5.89 A</td>
<td>4.75 A</td>
<td>6.03 A</td>
<td>4.99 A</td>
<td>6.21 A</td>
<td>5.02 A</td>
<td>6.38 A</td>
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<td>Module Efficiency STC (%)</td>
<td>8.94 %</td>
<td>7.97 %</td>
<td>8.44 %</td>
<td>7.46 %</td>
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<td>Operating Temperature (°C)</td>
<td>-0.4°C to +60°C</td>
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<tr>
<td>Maximum system voltage</td>
<td>1000/1500 VDC (DC)</td>
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<tr>
<td>Maximum series fuse rating</td>
<td>25 A</td>
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<td></td>
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<tr>
<td>Power tolerance</td>
<td>0~+3%</td>
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<td></td>
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<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Temperature coefficient of Pmax</td>
<td>-0.29 %/°C</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
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<td></td>
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<tr>
<td>Temperature coefficient of Voc</td>
<td>-0.26 %/°C</td>
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</tr>
<tr>
<td>Temperature coefficient of Isc</td>
<td>-0.24 %/°C</td>
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<td></td>
<td></td>
<td></td>
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<td></td>
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<tr>
<td>Nominal operating cell temperature (NOCT)</td>
<td>45°C</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

**STC: Irradiance 1000W/m², Cell Temperature 25°C, AM=1.5**

**NOCT: Irradiance 800W/m², Ambient Temperature 20°C, AM=1.5, Wind Speed 1m/s**

*Power measurement tolerance: ±3%*

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*The parameters of BIPV products are determined according to specified customization information, the datasheet is just for your reference. Specifications included in this datasheet are subject to change without notice for product improvement.
All-Black BIPV
375-395 Watt
Building Integrated PV

Positive power tolerance of 0~+3%

Key Features
- Elegant and Compact Design
- Higher Efficiency
- First-class safety
- Building Integrated
- A Wide Range of Colors
- Reliable performance
- Power Generated Building

PERFORMANCE WARRANTY
- 5 Year Product Warranty
- 25 Year Power Warranty
- 10% in the first 10 years and 20% in the remaining 15 years

SPECIFICATIONS

<table>
<thead>
<tr>
<th>Module Type</th>
<th>JBP377N-540-4 RV0 80V BOC</th>
<th>JBP378N-540-4 RV0 80V BOC</th>
<th>JBP3791N-540-4 RV0 80V BOC</th>
<th>JBP3797N-540-4 RV0 80V BOC</th>
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<tbody>
<tr>
<td>Module Efficiency STC (%)</td>
<td>18.41</td>
<td>18.61</td>
<td>18.61</td>
<td>18.41</td>
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<td>Operating Temperature(°C)</td>
<td>25.4°C</td>
<td>25.4°C</td>
<td>25.4°C</td>
<td>25.4°C</td>
</tr>
<tr>
<td>Maximum system voltage</td>
<td>1000/1000 VDC (SEC)</td>
<td>1000/1000 VDC (SEC)</td>
<td>1000/1000 VDC (SEC)</td>
<td>1000/1000 VDC (SEC)</td>
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<tr>
<td>Maximum series fuse rating</td>
<td>25 A</td>
<td>25 A</td>
<td>25 A</td>
<td>25 A</td>
</tr>
<tr>
<td>Power Tolerance</td>
<td>0.15 %</td>
<td>0.15 %</td>
<td>0.15 %</td>
<td>0.15 %</td>
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<tr>
<td>Temperature coefficient of Pmax</td>
<td>-0.29 %/°C</td>
<td>-0.29 %/°C</td>
<td>-0.29 %/°C</td>
<td>-0.29 %/°C</td>
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<tr>
<td>Temperature coefficient of Voc</td>
<td>-0.35 %/°C</td>
<td>-0.35 %/°C</td>
<td>-0.35 %/°C</td>
<td>-0.35 %/°C</td>
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<tr>
<td>Nominal operating cell temperature (NOCT)</td>
<td>45°C</td>
<td>45°C</td>
<td>45°C</td>
<td>45°C</td>
</tr>
</tbody>
</table>

Mechanical Characteristics

- Cell Type: Monocrystalline 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: [+]: 500mm; [-]: 200mm or Customized Length

PERFORMANCE WARRANTY

- 5 Year Product Warranty
- 25 Year Power Warranty
- 10% in the first 10 years and 20% in the remaining 15 years

* For detailed warranty information, please refer to our BIPV warranty document.
Transparent BIPV
245-265 Watt
Building Integrated PV

Positive power tolerance of 0~+3%

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

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

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

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.

Key Features

Elegant and Compact Design
One of the main advantages in solar architecture. Aesthetically appealing without metal wire exposition.

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

First-class safety
A rich palette of colors that fits different architectural styles.

Building Integrated
Aesthetic appeal without metal wire exposition.

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

Engineer Drawings

Electrical Performance & Temperature Dependence

Mechanical Characteristics

Packaging Configuration

Specifications
JSK-B51100-GI
Low Voltage LFP Battery

LONG LIFESPAN
10 years comprehensive warranty with more than 6000 life cycles

UNIQUE SAFETY
Ingress protection class of IP65 for flexible indoor and outdoor installation

PREMIUM SERVICE
Local based support available 24/7

SPECIFICATIONS

<table>
<thead>
<tr>
<th>Battery Pack</th>
<th>JKS-B51100-GI</th>
<th>JKS-B51200-GI</th>
<th>JKS-B51700-GI</th>
<th>JKS-B51600-GI</th>
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</thead>
<tbody>
<tr>
<td>Datasheet</td>
<td>JKS-B51100-GI</td>
<td>JKS-B51200-GI</td>
<td>JKS-B51700-GI</td>
<td>JKS-B51600-GI</td>
</tr>
</tbody>
</table>

- **System Demo**
- **Battery Modules**
- **Number of Modules**
- **Energy Capacity**
- **Usable Capacity**
- **Dimension (WxDxH)**
- **Weight**
- **Rated Charging/Discharging Power**
- **Max Charging/Discharging Power**
- **Max Charging/Discharging Current**

**GENERAL SPECIFICATION**

- **Battery Type**
- **Nominal Voltage**
- **Operating Voltage Range**
- **IP Protection**
- **Installation**
- **Operation Temperature**

**FEATURES**

- **Communication Port**
- **CAN, RS485**
- **Warranty**
- **10 Years**

**CERTIFICATION**

- **Cell Certificates**
- **IEC62196, IEC61755, UL1642, IEC62196, IEC62196, UL1642**
- **Pack Certificates**
- **IEC62196, IEC62196, UL1642**

1. The suggested charging temperature is 20°C~50°C whereas the suggested discharging temperature is 0°C~50°C.
2. Recommended Charging/Discharging time at 55°C.

CAUTION: READ SAFETY AND INSTALLATION INSTRUCTIONS BEFORE USING THE PRODUCT.
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1 Battery SOC Indicator Button
2 Battery SOC Indicator
3 Hidden cable connection box
JKR-B1250~2750-A
High Voltage LFP Battery

CIRCUIT DIAGRAM

LONG LIFESPAN
6,000 cycles backed by JinkoSolar 10-years authoritative warranty

QUICK INSTALLATION
No cable between packs design and support direct parallel connection

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

HIGH STACKABLE CAPACITY
Maximum 7 packs stackable, up to 26.88kWh

EXPANDABLE CAPACITY
Max parallel number is 5 packs, up to 134.4kWh

STRONG STABILITY
Protection rating at IP65 to enlarge the application scenario

SPECIFICATIONS

<table>
<thead>
<tr>
<th>Model</th>
<th>JKR-B1250-A</th>
<th>JKR-B1650-A</th>
<th>JKR-B2050-A</th>
<th>JKR-B2450-A</th>
<th>JKR-B2750-A</th>
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<td>15.36</td>
<td>19.20</td>
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<td>5</td>
<td>6</td>
<td>7</td>
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<td>Nominal Voltage(V)</td>
<td>250.4</td>
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<td>384</td>
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<tr>
<td>Maximum charge and discharge current(A)</td>
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<tr>
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<tr>
<td>Maximum Continuous Discharge Power (kW)</td>
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<td>15.824</td>
<td>17.28</td>
<td>20.756</td>
<td>24.192</td>
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<td>Maximum Continuous Charge Power (kW)</td>
<td>10.568</td>
<td>15.824</td>
<td>17.28</td>
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<td>Charging Temp. Range(°C)</td>
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<td>Discharging Temp. Range(°C)</td>
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<td>Net Weight (kg)</td>
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<td>161</td>
<td>197.5</td>
<td>234</td>
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<td>610<em>460</em>908</td>
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<td>610<em>460</em>1216</td>
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<td>Calendar Life</td>
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<tr>
<td>Warranty</td>
<td>10 years</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Protection Level</td>
<td>IP65</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Alarms</td>
<td>Over charge/Over discharge/Over current/Over temperature/Short Circuit</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Battery Module Type</td>
<td>lithium battery</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

CAUTION: READ SAFETY AND INSTALLATION INSTRUCTIONS BEFORE USING THE PRODUCT.
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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 smart real-time monitoring app is available for both installers and end-users to track system production.

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

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

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

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.

Compact and thin with minimalist exterior design.

**CIRCUIT DIAGRAM**

---

**SPECIFICATIONS**

<table>
<thead>
<tr>
<th>System Capacity</th>
<th>JKS10.2K-5HLVS</th>
</tr>
</thead>
<tbody>
<tr>
<td>PV String Input</td>
<td>Max. DC input power (W) 6000</td>
</tr>
<tr>
<td></td>
<td>Max. DC input voltage &amp; nominal voltage(V) 580 &amp; 560</td>
</tr>
<tr>
<td></td>
<td>Startup voltage &amp; MPPT voltage range(V) 90 &amp; 125-550</td>
</tr>
<tr>
<td></td>
<td>Number of MPPT 2</td>
</tr>
<tr>
<td></td>
<td>Max. input current per MPPT(A) 13</td>
</tr>
<tr>
<td></td>
<td>Max. short-circuit current per MPPT(A) 14</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Battery Input</th>
<th>Battery type LFP (LiFePO4)</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Nominal battery voltage(V) 51.2</td>
</tr>
<tr>
<td></td>
<td>Charging Voltage range (V) 44.6-57.6</td>
</tr>
<tr>
<td></td>
<td>Max. charging current &amp; discharging current(A) 70 &amp; 100</td>
</tr>
<tr>
<td></td>
<td>Battery capacity (Ah) 100Ah*2</td>
</tr>
<tr>
<td></td>
<td>Energy capacity (kWh) 5.12kWh*2</td>
</tr>
<tr>
<td></td>
<td>Usable capacity (kWh) 9.216</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>AC Output (Grid)</th>
<th>Nominal AC output power (W) 5000</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Nominal AC voltage &amp; AC grid frequency 250Vac &amp; 50/60Hz/50Hz</td>
</tr>
<tr>
<td></td>
<td>Rated output current(A) 22.8</td>
</tr>
<tr>
<td></td>
<td>Power factor (cos) 0.96-0.8lagging</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>AC Output (Backup)</th>
<th>Max. output power(W) 4600W(4800W 5min, 6000W 5sec)</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Nominal AC voltage &amp; AC grid frequency 250Vac &amp; 50/60Hz/50Hz</td>
</tr>
<tr>
<td></td>
<td>Rated output current(A) 20.9</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Efficiency</th>
<th>Max. PV efficiency 97.6%</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Euro. PV efficiency 97%</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Protection</th>
<th>Anti-islanding protection Yes</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Output over current Yes</td>
</tr>
<tr>
<td></td>
<td>DC reverse polarity protection Yes</td>
</tr>
<tr>
<td></td>
<td>String fault detection Yes</td>
</tr>
<tr>
<td></td>
<td>AC/DC surge protection DC Type II, AC Type III</td>
</tr>
<tr>
<td></td>
<td>Insulation detection Yes</td>
</tr>
<tr>
<td></td>
<td>AC short circuit protection Yes</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>General Specifications</th>
<th>Dimensions W x D x H 623<em>170</em>1843mm</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Cabinet weight 52kg</td>
</tr>
<tr>
<td></td>
<td>Inverter weight 28kg</td>
</tr>
<tr>
<td></td>
<td>Packs weight 88kg</td>
</tr>
<tr>
<td></td>
<td>*Operating temperature range -20°C~+55°C</td>
</tr>
<tr>
<td></td>
<td>Noise level &lt;30dB</td>
</tr>
<tr>
<td></td>
<td>Cooling type Natural Convection</td>
</tr>
<tr>
<td></td>
<td>Operation altitude ≤ 2000m</td>
</tr>
<tr>
<td></td>
<td>Operation humidity 0%-95%, 84</td>
</tr>
<tr>
<td></td>
<td>Ingress protection class IP65(Inverter &amp; battery cabinet)</td>
</tr>
<tr>
<td></td>
<td>Warranty 5 years (inverter)/10 years (battery)</td>
</tr>
<tr>
<td></td>
<td>Communication RS485/CAN2.0/WIFI</td>
</tr>
<tr>
<td></td>
<td>Display A20</td>
</tr>
<tr>
<td></td>
<td>Certification &amp; standard EN61700 IEC 62819 IEC 63056 UN 58.3 IEC 62109 NRS 097 CEI 0-21: 2022</td>
</tr>
</tbody>
</table>

*For charging operation: 0°C~+55°C, for discharging operation: -20°C~+55°C*
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.

**APPLICATION**

**HIGHLY INTEGRATED**
- High energy-density system with capacity of 215kWh.
- Module design, easy to expand

**RELIABLE AND SAFE**
- Intelligent monitoring and linkage action ensures system safety.
- Integrated heating system for thermal safety and enhanced performance and reliability.

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

**SMART SOFTWARE**
- Multiple operation modes are available, the software can be customized and upgraded.
- Cloud monitoring and operation platform supports the real time monitoring, ensuring highly efficient commission.

**SYSTEM DESCRIPTION**

**JXS-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.

**APPLICATION**

**PEAK SHAVING**
- Optimize power consumption with battery energy storage systems.

**ENERGY BACKUP**
- Supply power to facilities when the grid is down, or apply in areas without power.

**OPTIMIZATION THE USE OF RENEWABLE ENERGY**
- Maximize the use of PV and the excess power can be stored for using at night.

**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**
- 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 cooling

**System Parameter**
- **Operating temperature range**: -20°C~50°C
- **Humidity**: ≤95% RH, non-condensing
- **Working altitude**: ≤2000m
- **Protection level**: IP54
- **Fire Fighting Media**: Novec 1230
- **Anti-corrosion grade**: C5
- **Dimension(W×D×H)**: 1300x1300x2300mm
- **Communication Interface**: RS485/CAN/Ethernet

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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, offgas detection, deflagration venting, water dry pipe, it safeguards the overall safety and prolongs the system life. The industry leading high energy density enables its containerized 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
Nonuniform and refined pipeline design, achieving temperature difference ≤ 2.5°C

FIVE LIQUID COOLING control modes and auxiliary power consumption decrease by 25%

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

Equipped with deflagration venting, gas fire protection and water suppression to ensure the final protection

HIGHER EFFICIENCY
Adopting cluster management technology and system efficiency increases by 1%

Cell to Cell active balance ensures the consistency between cell

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 688mm/40x

ESS in Power Generation
Support the widespread deployment of renewable energy and provide ancillary services of the grid

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

<table>
<thead>
<tr>
<th>Items</th>
<th>Parameters</th>
</tr>
</thead>
<tbody>
<tr>
<td>Type of cell</td>
<td>Lithium Iron Phosphate(LFP)</td>
</tr>
<tr>
<td>Cell</td>
<td>3.2V/2400Ah</td>
</tr>
<tr>
<td>Max. charge/discharge power</td>
<td>0.5P</td>
</tr>
<tr>
<td>Battery combination mode</td>
<td>1P13465+10</td>
</tr>
<tr>
<td>Rated capacity</td>
<td>3.44 MWh</td>
</tr>
<tr>
<td>Rated voltage</td>
<td>1228.8V</td>
</tr>
<tr>
<td>Voltage range</td>
<td>1075.2-1382.4V</td>
</tr>
<tr>
<td>Cooling method</td>
<td>Liquid Cooling</td>
</tr>
<tr>
<td>Environmental temperature</td>
<td>-20-50°C</td>
</tr>
<tr>
<td>Environmental humidity</td>
<td>&lt;95%RH, Non condensation</td>
</tr>
<tr>
<td>Altitude</td>
<td>≤ 2000m / &lt;4000m (optional, derating)</td>
</tr>
<tr>
<td>Noise level</td>
<td>&lt; 80dBA@1m</td>
</tr>
<tr>
<td>IP Grade</td>
<td>IP54</td>
</tr>
<tr>
<td>Storage temperature</td>
<td>-20-45°C</td>
</tr>
<tr>
<td>Corrosion-proof grade</td>
<td>CS (EN ISO 12944/C4 (optional)/CS(optimal)</td>
</tr>
<tr>
<td>Fire protection</td>
<td>Gas Sensors+Deflagration Venting + FM 200(Novec 1230)/Aerosol + Water Dry Pipe</td>
</tr>
<tr>
<td>External communication interface</td>
<td>Ethernet/Fiber (Optional)</td>
</tr>
<tr>
<td>Dimensions (LxWxH)</td>
<td>6058+2438+2896mm</td>
</tr>
<tr>
<td>Weight</td>
<td>≤3500kg</td>
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</tbody>
</table>

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