JA smart modules incorporate innovative power electronics from Tigo Energy to achieve module-level diagnostics, maximum energy harvest through module-level DC power optimization, and reduction of arc, fire and safety hazards. Integration of the module optimizer into the junction box enables patented Smart Curve technology, which allows up to 30% longer strings and significant balance-of-system (BOS) savings.

345W Smart Module

Poly
JAP72S04 325-345/SC

Introduction

More efficient O&M

Flexible system assembly

Maximized energy Harvest

Superior Warranty

12-year product warranty
25-year linear power output warranty

100%
97.5%
90%
80%

5 10 15 20 25 year

JA Linear Power Warranty Industry Warranty

Comprehensive Certificates

- IEC 61215, IEC 61730
- ISO 9001: 2015 Quality management systems
- ISO 14001: 2015 Environmental management systems
- OHSAS 18001: 2007 Occupational health and safety management systems

www.jasolar.com

Specifictions subject to technical changes and tests.
JA Solar reserves the right of final interpretation.

Shanghai JA Solar Technology Co., Ltd.
JA Solar smart system components work together with any inverter to maximize energy harvest. JA smart modules communicate wirelessly through the gateway, allowing users to monitor system performance in real time.

**Smart Curve Technology**
- Hardware voltage clamp prevents over-voltage
- Design up to 30% longer strings
- Fewer combiner boxes, fuses and wiring
- Smaller resistance losses

### SYSTEM ARCHITECTURE

**Hardware voltage clamp prevents over-voltage**
- **Design up to 30% longer strings**
- **Fewer combiner boxes, fuses and wiring**
- **Smaller resistance losses**

### MECHANICAL DIAGRAMS

**ELECTRICAL PARAMETERS AT STC**

<table>
<thead>
<tr>
<th></th>
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</thead>
<tbody>
<tr>
<td>Rated Maximum Power (Pmax) [W]</td>
<td>325</td>
<td>330</td>
<td>335</td>
<td>340</td>
<td>345</td>
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<tr>
<td>Open Circuit Voltage (Voc) [V]</td>
<td>42.33</td>
<td>42.60</td>
<td>42.80</td>
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<td>43.30</td>
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<td>Maximum Power Voltage (Vmp) [V]</td>
<td>37.39</td>
<td>37.65</td>
<td>37.83</td>
<td>38.04</td>
<td>38.30</td>
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<tr>
<td>Maximum Power Current (Imp) [A]</td>
<td>8.89</td>
<td>8.77</td>
<td>8.87</td>
<td>8.94</td>
<td>9.01</td>
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<td>Module Efficiency [%]</td>
<td>16.7</td>
<td>17.0</td>
<td>17.2</td>
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<td>Power Tolerance</td>
<td>0~+5W</td>
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<tr>
<td>Temperature Coefficient of Isc (α_Isc)</td>
<td>+0.058%/°C</td>
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<tr>
<td>Temperature Coefficient of Voc (β_Voc)</td>
<td>0%/°C</td>
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<tr>
<td>Temperature Coefficient of Pmax (γ_Pmp)</td>
<td>-0.400%/°C</td>
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**STC**
- Irradiance 1000W/m², cell temperature 25°C, AM1.5G

**ELECTRICAL PARAMETERS AT NOCT**

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<thead>
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<tbody>
<tr>
<td>Rated Max Power (Pmax) [W]</td>
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<td>252</td>
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<td>Open Circuit Voltage (Voc) [V]</td>
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<tr>
<td>Max Power Voltage (Vmp) [V]</td>
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<td>35.03</td>
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<tr>
<td>Short Circuit Current (Isc) [A]</td>
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<td>7.40</td>
<td>7.46</td>
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<tr>
<td>Max Power Current (Imp) [A]</td>
<td>6.91</td>
<td>6.97</td>
<td>7.04</td>
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<td>7.16</td>
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<td>NOCT</td>
<td>60°C</td>
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</tbody>
</table>
- Irradiance 800W/m², ambient temperature 20°C, wind speed 1m/s, AM1.5G

**OPERATING CONDITIONS**
- Maximum System Voltage: 1000V DC (IEC)
- Operating Temperature: -40°C~+95°C
- Maximum Series Fuse: 20A
- Maximum Static Load: Front 3600Pa, 1.5
- Maximum Static Load: Back 1600Pa, 1.5
- NOCT: 45±2°C
- Application Class: Class A

**CHARACTERISTICS**

<table>
<thead>
<tr>
<th>Current-Voltage Curve</th>
<th>JAP72S04-325/SC</th>
</tr>
</thead>
<tbody>
<tr>
<td>PV 2.0</td>
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</tbody>
</table>

**Remark:** Electrical data in this catalog do not refer to a single module and they are not part of the offer. They only serve for comparison among different module types.

**Remark:** Customized frame color and cable length available upon request.

**SPECIFICATIONS**
- **Cell:** Poly
- **Weight:** 22.5kg ± 3%
- **Dimensions:** 1960mm × 991mm × 40mm
- **Cable Cross Section Size:** 4mm²
- **No. of cells:** 72 (6 × 12)
- **Junction Box:** Tigo smart J-Box IP67
- **Connector:** PV-KST4(Male), PV-KBT4(Female) PV2H-202(N&B,Dr)

**Country of Manufacturer:** China/Vietnam