Risen Energy is a leading, global tier 1 manufacturer of high-performance solar photovoltaic products and provider of total business solutions for residential, commercial and utility-scale power generation. The company, founded in 1986, and publicly listed in 2010, compels value generation for its chosen global customers. Techno-commercial innovation, underpinned by consummate quality and support, encircle Risen Energy's total Solar PV business solutions which are among the most powerful and cost-effective in the industry. With local market presence and strong financial bankability status, we are committed, and able, to building strategic, mutually beneficial collaborations with our partners, as together we capitalise on the rising value of green energy.

RSM130-8-430M-450M
130 CELL
Mono PERC Module
430-450Wp
Power Output Range
1500VDC
Maximum System Voltage
21.7%
Maximum Efficiency

KEY SALIENT FEATURES
- Global, Tier 1 bankable brand, with independently certified state-of-the-art automated manufacturing
- Industry leading lowest thermal co-efficient of power
- Industry leading 12 years product warranty
- Excellent low irradiance performance
- Excellent PID resistance
- Positive power tolerance of 0~+3%
- Dual stage 100% EL Inspection warranting defect-free product
- Module Imp binning radically reduces string mismatch losses
- Excellent wind load 2400Pa & snow load 5400Pa under certain installation method
- Comprehensive product and system certification
  - IEC61215:2016; IEC61730-1/-2:2016;
  - ISO 9001:2015 Quality Management System
  - ISO 14001:2015 Environmental Management System
  - ISO 45001:2018 Occupational Health and Safety Management System

LINEAR PERFORMANCE WARRANTY
12 year Product Warranty / 25 year Linear Power Warranty

As there are different certification requirements in different markets, please contact your local Risen Energy sales representative for the specific certificates applicable to the products in the region in which the products are to be used.

Risen Energy Co., Ltd.

Tashan Industry Zone, Meilin, Ninghai 315609, Ningbo | PRC
Tel: +86-574-59953239  Fax: +86-574-59953599
E-mail: marketing@risenenergy.com  Website: www.risenenergy.com
ELECTRICAL DATA (STC)

<table>
<thead>
<tr>
<th>Model Number</th>
<th>RSM130-8-430M</th>
<th>RSM130-8-435M</th>
<th>RSM130-8-440M</th>
<th>RSM130-8-445M</th>
<th>RSM130-8-450M</th>
</tr>
</thead>
<tbody>
<tr>
<td>Rated Power in Watts-Pmax (Wp)</td>
<td>430</td>
<td>435</td>
<td>440</td>
<td>445</td>
<td>450</td>
</tr>
<tr>
<td>Open Circuit Voltage-Voc (V)</td>
<td>44.36</td>
<td>44.61</td>
<td>44.85</td>
<td>45.09</td>
<td>45.33</td>
</tr>
<tr>
<td>Short Circuit Current-Isc (A)</td>
<td>12.35</td>
<td>12.42</td>
<td>12.50</td>
<td>12.57</td>
<td>12.65</td>
</tr>
<tr>
<td>Maximum Power Voltage-Vmp(V)</td>
<td>36.94</td>
<td>37.14</td>
<td>37.34</td>
<td>37.54</td>
<td>37.74</td>
</tr>
<tr>
<td>Maximum Power Current-Impp(A)</td>
<td>11.65</td>
<td>11.72</td>
<td>11.79</td>
<td>11.86</td>
<td>11.93</td>
</tr>
<tr>
<td>Module Efficiency (%)</td>
<td>20.7</td>
<td>21.0</td>
<td>21.2</td>
<td>21.4</td>
<td>21.7</td>
</tr>
</tbody>
</table>

STC: Irradiance 1000 W/m², Cell Temperature 25°C, Air Mass AM1.5 according to EN 60904-3.
★ Module Efficiency (%): Round-off to the nearest number

ELECTRICAL DATA (NMOT)

<table>
<thead>
<tr>
<th>Model Number</th>
<th>RSM130-8-430M</th>
<th>RSM130-8-435M</th>
<th>RSM130-8-440M</th>
<th>RSM130-8-445M</th>
<th>RSM130-8-450M</th>
</tr>
</thead>
<tbody>
<tr>
<td>Maximum Power-Pmax (Wp)</td>
<td>325.9</td>
<td>329.6</td>
<td>333.4</td>
<td>337.1</td>
<td>340.9</td>
</tr>
<tr>
<td>Open Circuit Voltage-Voc (V)</td>
<td>41.26</td>
<td>41.48</td>
<td>41.71</td>
<td>41.93</td>
<td>42.15</td>
</tr>
<tr>
<td>Short Circuit Current-Isc (A)</td>
<td>10.13</td>
<td>10.19</td>
<td>10.25</td>
<td>10.31</td>
<td>10.37</td>
</tr>
<tr>
<td>Maximum Power Voltage-Vmp(V)</td>
<td>34.28</td>
<td>34.47</td>
<td>34.65</td>
<td>34.84</td>
<td>35.02</td>
</tr>
<tr>
<td>Maximum Power Current-Impp(A)</td>
<td>9.51</td>
<td>9.56</td>
<td>9.62</td>
<td>9.68</td>
<td>9.73</td>
</tr>
</tbody>
</table>

NMOT: Irradiance at 800 W/m², Ambient Temperature 20°C, Wind Speed 1 m/s.

MECHANICAL DATA

Solar cells: Monocrystalline
Cell configuration: 130 cells (5×13+5×13)
Module dimensions: 1894×1096×30mm
Weight: 22.5kg
Superstrate: High Transmission, Low Iron, Tempered ARC Glass
Substrate: White Back-sheet
Frame: Anodized Aluminium Alloy type 6005-2T6, Black
J-Box: Potted, IP68, 1500VDC, 3 Schottky bypass diodes
Cables: 4.0mm² (12AWG), Positive(+)350mm, Negative(-)230mm (Connector Included)
Connector: Risen Twinsel PV-SY02, IP68

TEMPERATURE & MAXIMUM RATINGS

Nominal Module Operating Temperature (NMOT) | 44°C±2°C
Temperature Coefficient of Voc | -0.25%/°C
Temperature Coefficient of Isc | 0.04%/°C
Temperature Coefficient of Pmax | -0.34%/°C
Operational Temperature | -40°C~+85°C
Maximum System Voltage | 1500VDC
Max Series Fuse Rating | 20A
Limiting Reverse Current | 20A

PACKAGING CONFIGURATION

<table>
<thead>
<tr>
<th></th>
<th>40ft(HQ)</th>
<th>20ft</th>
</tr>
</thead>
<tbody>
<tr>
<td>Number of modules per container</td>
<td>864</td>
<td>216</td>
</tr>
<tr>
<td>Number of modules per pallet</td>
<td>36</td>
<td>36</td>
</tr>
<tr>
<td>Number of pallets per container</td>
<td>24</td>
<td>6</td>
</tr>
<tr>
<td>Packaging box dimensions (LxWxH) in mm</td>
<td>1910×1110×1236</td>
<td>1910×1110×1236</td>
</tr>
<tr>
<td>Box gross weight[kg]</td>
<td>850</td>
<td>850</td>
</tr>
</tbody>
</table>

CAUTION: READ SAFETY AND INSTALLATION INSTRUCTIONS BEFORE USING THE PRODUCT.
©2022 Risen Energy. All rights reserved. Contents included in this datasheet are subject to change without notice.

No special undertaking or warranty for the suitability of special purpose or being installed in extraordinary surroundings is granted unless as otherwise specifically committed by manufacturer in contract document.