18.9% efficiency at weak-light
Because a 3% increase in yield makes a difference.

99% relative efficiency at weak-light
Because a 3% increase in yield makes a difference.

Protection against the weather and the elements
Because long term performance matters.

Designed for fire safety
Because plant fires mean more than financial losses alone.

25 year linear performance guarantee
15 year product warranty.

2 years of free insurance included
Because you never know what tomorrow might bring.

Made in Taiwan
Home of high precision semiconductor manufacturing.
**Mechanical data**

Cell: Monocrystalline 156.75 x 156.75 mm silicon cells

Quantity and wiring of cells: 60 in series

Dimensions: 1,665 x 999 x 40 mm
(65.55 x 39.33 x 1.57 in)

Weight: 19.6 kg (43.2 lbs)

Glass thickness: 3.2 mm (0.13 in)

Frame: Black anodised aluminium

Junction box: IP 67

Connector type: MC4 (PV-KBT4/PV-KST4) IP68; QC4.10 IP67

Module fire performance: Type 1

**Operating conditions**

Operating temperature: -40°C to +85°C

Maximum system voltage IEC/UL: 1,000 V/1,000 V

Maximum series fuse: 20 A

Maximum load: 5,400 Pa

Nominal operating cell temperature NOCT: 45±3°C

Temperature coefficient of P<sub>MAX</sub>: -0.43%/°C

Temperature coefficient of V<sub>OC</sub>: -0.29%/°C

Temperature coefficient of I<sub>SC</sub>: 0.06%/°C

**Certifications**

IEC 61215, IEC 61730-1/-2, UL 1703 Ed. 3, MCS, CE

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**Electrical data (STC)**

<table>
<thead>
<tr>
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<th>WSP-310M6</th>
<th>WSP-315M6</th>
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<tr>
<td>P&lt;sub&gt;MAX&lt;/sub&gt;</td>
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<td>V&lt;sub&gt;MP&lt;/sub&gt;</td>
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<tr>
<td>I&lt;sub&gt;SC&lt;/sub&gt;</td>
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<tr>
<td>Efficiency</td>
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<td>18.9%</td>
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<tr>
<td>Power tolerance</td>
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**Electrical data (NOCT)**

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<th>WSP-310M6</th>
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<tbody>
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<td>I&lt;sub&gt;SC&lt;/sub&gt;</td>
<td>8.11</td>
<td>8.19</td>
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</table>

Reduction in the module efficiency rating from 1,000 W/m<sup>2</sup> to 200 W/m<sup>2</sup>: < 4%. The electrical data applies under standard test conditions (STC): solar radiation 1,000 W/m<sup>2</sup> with light spectrum AM 1.5, with cell temperature 25°C. Measurement tolerance of P<sub>MAX</sub> at STC: ±3%. Accuracy of other electrical data: ±10%.

The electrical data applies under normal operating cell temperature (NOCT): solar radiation 800 W/m<sup>2</sup>, AM 1.5, air temperature 20°C, wind speed 1 m/s.

This frame design, produced entirely from aluminium, guarantees maximum stability and protection against material fatigue. The rounded corners provide greater torsional stiffness and waterproofing in this critical area, where the material is at its weakest. In contrast to other corner connections that use mitred cuts or threaded connections, WINAICO’s corner pieces guarantee the best possible transfer of tension across each section of the frame.