AXIpremium XL HC
430 - 450 Wp

High performance solar module
144 halfcell, monocrystalline

German-American-Engineering

The advantages:

15 years Manufacturer’s warranty

High module performance through
Half-Cut-technology and selected materials

Guaranteed positive power tolerance
from 0-5 Wp by individual measurement

100% visual electroluminescence inspection
in production

High stability due to innovative frame design

High quality junction box
and connector systems

25 years Performance guarantee

Exclusive linear AXITEC high performance guarantee!

AXITEC Warranty Added Value: up to
5% more power after 25 years
**AXI premium XL HC 430 - 450 Wp**

### Electrical data (at standard conditions (STC) irradiance 1000 watt/m², spectrum AM 1.5 at a cell temperature of 25°C)

<table>
<thead>
<tr>
<th>Type</th>
<th>Nominal output (Pmpp)</th>
<th>Nominal voltage (Umpp)</th>
<th>Nominal current (Impp)</th>
<th>Short circuit current (Isc)</th>
<th>Open circuit voltage (Uoc)</th>
<th>Module conversion efficiency</th>
</tr>
</thead>
<tbody>
<tr>
<td>AC-430MH/144V</td>
<td>430 Wp</td>
<td>40.60 V</td>
<td>10.60 A</td>
<td>11.19 A</td>
<td>49.20 V</td>
<td>19.78 %</td>
</tr>
<tr>
<td>AC-435MH/144V</td>
<td>435 Wp</td>
<td>40.80 V</td>
<td>10.67 A</td>
<td>11.26 A</td>
<td>49.40 V</td>
<td>20.1 %</td>
</tr>
<tr>
<td>AC-440MH/144V</td>
<td>440 Wp</td>
<td>41.00 V</td>
<td>10.74 A</td>
<td>11.33 A</td>
<td>49.60 V</td>
<td>20.4 %</td>
</tr>
<tr>
<td>AC-445MH/144V</td>
<td>445 Wp</td>
<td>41.20 V</td>
<td>10.81 A</td>
<td>11.40 A</td>
<td>49.80 V</td>
<td>20.7 %</td>
</tr>
<tr>
<td>AC-450MH/144V</td>
<td>450 Wp</td>
<td>41.40 V</td>
<td>10.88 A</td>
<td>11.47 A</td>
<td>50.00 V</td>
<td>20.9 %</td>
</tr>
</tbody>
</table>

### Design

- **Frontside**: 0.13 inch (3.2 mm) hardened, low-reflection white glass
- **Cells**: 144 monocrystalline high efficiency cells
- **Backside**: Composite film
- **Frame**: 1.38 inch (35 mm) silver aluminium frame

### Mechanical data

- **L x W x H**: 82.44 x 40.87 x 1.38 inch (2094 x 1038 x 35 mm)
- **Weight**: 52.47 lbs (23.8 kg) with frame

### Mechanical load

- **Design load (pressure/suction)**: 33.3 PSF / 33.3 PSF
- **Test load (pressure/suction)**: 50 PSF / 50 PSF

### Power connection

- **Socket**: Protection Class IP68
- **Wire**: 47.24 inch, AWG 11
- **Plug-in system**: Plug/socket IP68, Stäubli EVO2

### Limit values

- **System voltage**: 1500 VDC (UL) 1000 VDC (IEC)
- **Module Fire Performance**: TYPE 1 (UL 1703) or CLASS C (IEC 61730)
- **NOCT (nominal operating cell temperature)**: 45°C +/-2K
- **Reverse current feed IR**: 20.0 A
- **Permissible operating temperature**: -40°C to 85°C / -40°F to 185°F

(No external voltages greater than Vo may be applied to the module)

* NOCT, irradiance 800 W/m²; AM 1.5; wind speed 1 m/s; Temperature 20°C

### Temperature coefficients

- **Voltage Uoc**: -0.27 %/K
- **Current Isc**: 0.048 %/K
- **Output Pmpp**: -0.35 %/K

### Low-light performance (Example for AC-450MH/144V)

<table>
<thead>
<tr>
<th>I-U characteristic curve</th>
<th>Current Ipp</th>
<th>Voltage Upp</th>
</tr>
</thead>
<tbody>
<tr>
<td>200 W/m²</td>
<td>2.22 A</td>
<td>39.84 V</td>
</tr>
<tr>
<td>400 W/m²</td>
<td>4.49 A</td>
<td>40.30 V</td>
</tr>
<tr>
<td>600 W/m²</td>
<td>6.70 A</td>
<td>40.62 V</td>
</tr>
<tr>
<td>800 W/m²</td>
<td>8.86 A</td>
<td>40.97 V</td>
</tr>
<tr>
<td>1000 W/m²</td>
<td>10.88 A</td>
<td>41.40 V</td>
</tr>
</tbody>
</table>

### Packaging

- **Module pieces per pallet**: 30
- **Module pieces per HC-container**: 660

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Technical data are subject to change without prior notice, errors excepted. The measurement tolerances are +/-3%. Please be aware: All technical data provided in our data sheets are property of Axitec LLC and intended for information purposes for our customers only. We cannot accept any guarantee of completeness or accuracy. These data are prohibited for any kind of commercial use.