**AXIpremium XXL HC**

High performance solar module
144 halfcell, monocrystalline

German-American-Engineering

The advantages:

15 Years
- 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

Exclusive linear AXITEC high performance guarantee!
- 15 years manufacturer's guarantee on 90% of the nominal performance
- 25 years manufacturer's guarantee on 85% of the nominal performance

AXITEC Warranty Added Value!

1 - 8% more power after 25 years

Conforms to UL STD No.1703
Certified to ULC/ORD Std. C1703
AXIpremium XXL HC 550 - 555 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</th>
<th>Nominal voltage</th>
<th>Nominal current</th>
<th>Short circuit current</th>
<th>Open circuit voltage</th>
<th>Module conversion efficiency</th>
</tr>
</thead>
<tbody>
<tr>
<td>AC-530MH/144V</td>
<td>530 Wp</td>
<td>41.31 V</td>
<td>12.83 A</td>
<td>13.72 A</td>
<td>49.30 V</td>
<td>20.52 %</td>
</tr>
<tr>
<td>AC-535MH/144V</td>
<td>535 Wp</td>
<td>41.47 V</td>
<td>12.91 A</td>
<td>13.79 A</td>
<td>49.45 V</td>
<td>20.71 %</td>
</tr>
<tr>
<td>AC-540MH/144V</td>
<td>540 Wp</td>
<td>41.64 V</td>
<td>12.97 A</td>
<td>13.86 A</td>
<td>49.60 V</td>
<td>20.90 %</td>
</tr>
<tr>
<td>AC-545MH/144V</td>
<td>545 Wp</td>
<td>41.80 V</td>
<td>13.04 A</td>
<td>13.93 A</td>
<td>49.75 V</td>
<td>21.10 %</td>
</tr>
<tr>
<td>AC-550MH/144V</td>
<td>550 Wp</td>
<td>41.96 V</td>
<td>13.11 A</td>
<td>14.00 A</td>
<td>49.90 V</td>
<td>21.29 %</td>
</tr>
<tr>
<td>AC-555MH/144V</td>
<td>555 Wp</td>
<td>42.11 V</td>
<td>13.18 A</td>
<td>14.07 A</td>
<td>50.05 V</td>
<td>21.48 %</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: 89.68 x 44.64 x 1.38 inch (2278 x 1134 x 35mm)
Weight: 61.73 lbs (28 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: 51.18 inch, AWG 12
Plug-in system: Plug/socket IP68, Stäubli MC4 / 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: 25.0 A
Permissible operating temperature: -40°C to 85°C / -40F to 185F

(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: -0.25 %/K
Current Isc: 0.048 %/K
Output Pmpp: -0.35 %/K

**Low-light performance** (Example for AC-455MH/144V)

I-U characteristic curve | Current Ipp | Voltage Upp
---|---|---
200 W/m² | 2.69 A | 40.53 V
400 W/m² | 5.43 A | 40.99 V
600 W/m² | 8.12 A | 41.31 V
800 W/m² | 10.73 A | 41.67 V
1000 W/m² | 13.18 A | 42.11 V

**Packaging**

Module pieces per pallet: 31
Module pieces per HC-container: 620

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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.