



**390 - 410 Wp**

[www.axitecsolar.us](http://www.axitecsolar.us)

**AXITEC®**  
high quality german solar brand

## AXIpremium X HC

144 cell full-square monocrystalline  
High performance solar module

German engineered – made for America

**15**  
Years

15 years manufacturer's warranty  
Five more years than industry standard

HC

Highest module performance through  
Half-Cut-technology and tested materials

Wp

Positive power tolerance from 0-5 Wp  
Higher guaranteed yield

50 PSF

Snow load of up to 50 psf  
Stable module for a long life in extreme conditions

100%

100 % electroluminescence inspection  
Micro crack and hotspot free modules

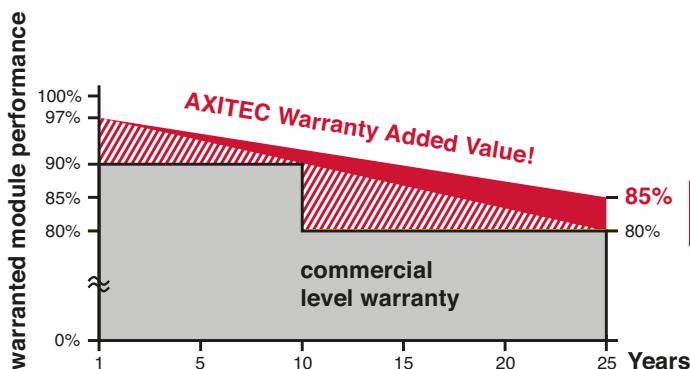
IP 68

High quality junction box and connector  
system for a longer life time



### 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



(PHOTOVOLTAIC MODULE  
OVER 600 VOLTS) 5JK4  
E487509

144MHUSA191104A

Fig. similar

# AXIpremium X HC 390 - 410 Wp

**Electrical data** (at standard conditions (STC) irradiance 1000 watt/m<sup>2</sup>, spectrum AM 1.5 at a cell temperature of 25°C)

| Type          | Nominal output<br>Pmpp | Nominal voltage<br>Umpp | Nominal current<br>Impp | Short circuit current<br>Isc | Open circuit voltage<br>Uoc | Module conversion<br>efficiency |
|---------------|------------------------|-------------------------|-------------------------|------------------------------|-----------------------------|---------------------------------|
| AC-390MH/144S | 390 Wp                 | 40.50 V                 | 9.64 A                  | 10.21 A                      | 48.30 V                     | 19.38 %                         |
| AC-395MH/144S | 395 Wp                 | 40.80 V                 | 9.69 A                  | 10.33 A                      | 48.52 V                     | 19.63 %                         |
| AC-400MH/144S | 400 Wp                 | 41.12 V                 | 9.74 A                  | 10.46 A                      | 48.81 V                     | 19.88 %                         |
| AC-405MH/144S | 405 Wp                 | 41.43 V                 | 9.79 A                  | 10.59 A                      | 49.50 V                     | 20.13 %                         |
| AC-410MH/144S | 410 Wp                 | 41.75 V                 | 9.83 A                  | 10.72 A                      | 49.79 V                     | 20.38 %                         |

## Design

|           |   |
|-----------|---|
| Frontside | 0.13 inch (3.2 mm) hardened, low-reflection white glass |
| Cells     | 144 monocrystalline high efficiency cells               |
| Backside  | Composite film  |
| Frame     | 1.57 inch (40 mm) silver aluminium frame                |

## Mechanical data

|           |   |
|-----------|---|
| L x W x H | 78.06 x 39.45 x 1.57 inch (2008 x 1002 x 40 mm) |
| Weight    | 50.71 lbs (23.0 kg) with frame                  |

## Power connection

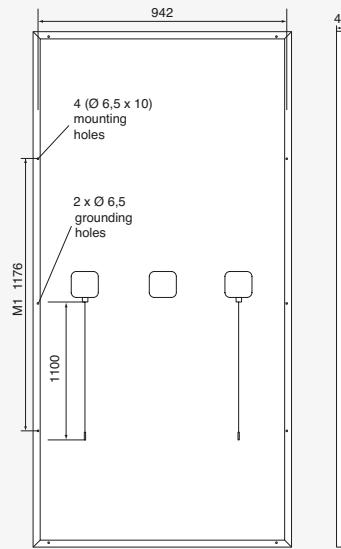
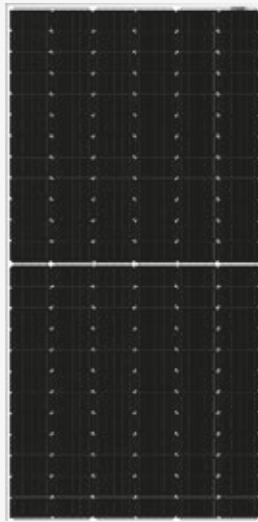
|                |                       |
|----------------|-----------------------|
| Socket         | Protection Class IP68 |
| Wire           | 43.3 inch, AWG 11     |
| Plug-in system | Plug/socket IP68, MC4 |

## Limit values

|  |  |
|--|--|
| System voltage                             | 1000 VDC (UL) 1000 VDC (IEC)               |
| Module Fire Performance                    | TYPE 1 (UL 1703)<br>or CLASS C (IEC 61730) |
| NOCT (nominal operating cell temperature)* | 45°C +/-2K                                 |
| Max. load-carrying capacity                | 50 PSF                                     |
| Reverse current feed IR                    | 20.0 A                                     |
| Permissible operating<br>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/m<sup>2</sup>; AM 1.5;  
wind speed 1 m/s; Temperature 20°C



All dimensions in inch

## Temperature coefficients

|             |           |
|-------------|-----------|
| Voltage Uoc | -0.29 %/K |
| Current Isc | 0.04 %/K  |
| Output Pmpp | -0.39 %/K |

## Low-light performance (Example for AC-400M/144S)

| I-U characteristic curve | Current Ipp | Voltage Upp |
|--------------------------|-------------|-------------|
| 200 W/m <sup>2</sup>     | 1.98 A      | 37.40 V     |
| 400 W/m <sup>2</sup>     | 4.27 A      | 38.04 V     |
| 600 W/m <sup>2</sup>     | 6.12 A      | 40.88 V     |
| 800 W/m <sup>2</sup>     | 7.694 A     | 41.06 V     |
| 1000 W/m <sup>2</sup>    | 9.74 A      | 41.12 V     |

## Packaging

|                                |     |
|--------------------------------|-----|
| Module pieces per pallet       | 25  |
| Module pieces per HC-container | 550 |