



385 - 415 Wp

**AXITEC**  
high quality german solar brand

## AXIpremium X HC

High performance solar module  
144 halfcell, full-square, monocrystalline

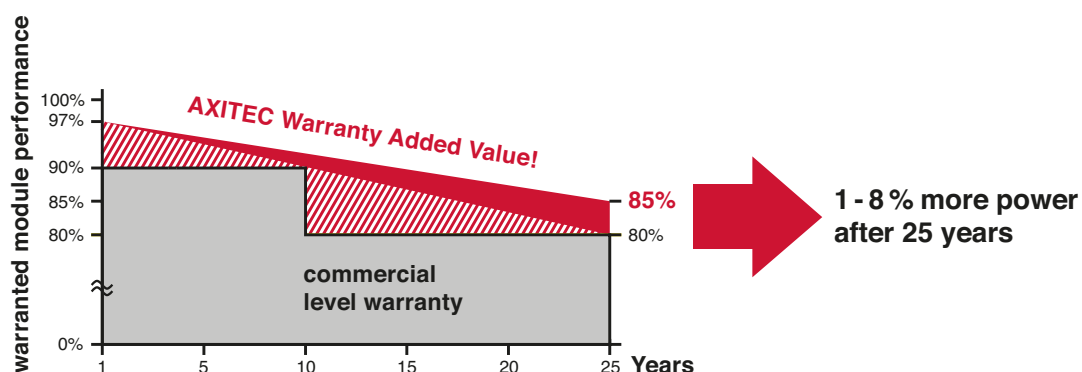
The advantages:

- 15** Years 15 years Manufacturer's warranty
- HC** High module performance through Half-Cut-technology and selected materials
- Wp** Guaranteed positive power tolerance from 0-5 Wp by individual measurement
- 100%** 100% visual electroluminescence inspection in production
- Frame** High stability due to innovative frame design
- IP 68** 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



## AXIpremium X HC 385 - 415 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>P <sub>mpp</sub> | Nominal voltage<br>U <sub>mpp</sub> | Nominal current<br>I <sub>mpp</sub> | Short circuit current<br>I <sub>sc</sub> | Open circuit voltage<br>U <sub>oc</sub> | Module conversion<br>efficiency |
|---------------|------------------------------------|-------------------------------------|-------------------------------------|--|---|---------------------------------|
| AC-385MH/144V | 385 Wp                             | 40.24 V                             | 9.58 A                              | 10.10 A                                  | 48.11 V                                 | 19.14 %                         |
| AC-390MH/144V | 390 Wp                             | 40.50 V                             | 9.64 A                              | 10.21 A                                  | 48.30 V                                 | 19.38 %                         |
| AC-395MH/144V | 395 Wp                             | 40.80 V                             | 9.69 A                              | 10.33 A                                  | 48.52 V                                 | 19.63 %                         |
| AC-400MH/144V | 400 Wp                             | 41.12 V                             | 9.74 A                              | 10.46 A                                  | 48.81 V                                 | 19.88 %                         |
| AC-405MH/144V | 405 Wp                             | 41.43 V                             | 9.79 A                              | 10.59 A                                  | 49.50 V                                 | 20.13 %                         |
| AC-410MH/144V | 410 Wp                             | 41.75 V                             | 9.83 A                              | 10.72 A                                  | 49.79 V                                 | 20.38 %                         |
| AC-415MH/144V | 415 Wp                             | 41.98 V                             | 9.89 A                              | 10.84 A                                  | 50.08 V                                 | 20.63 %                         |

### Design

|           |   |
|-----------|---|
| Frontside | 3.2 mm hardened, low-reflection white glass |
| Cells     | 144 monocrystalline high efficiency cells   |
| Backside  | Composite film                              |
| Frame     | 35 mm silver aluminium frame                |

### Mechanical data

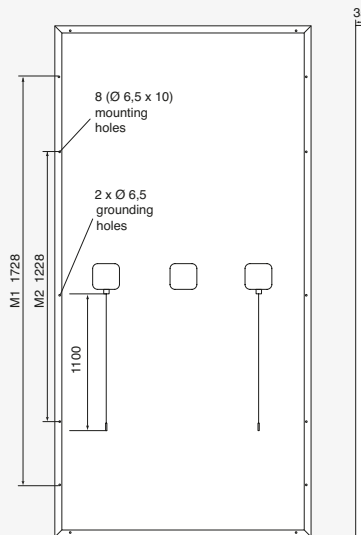
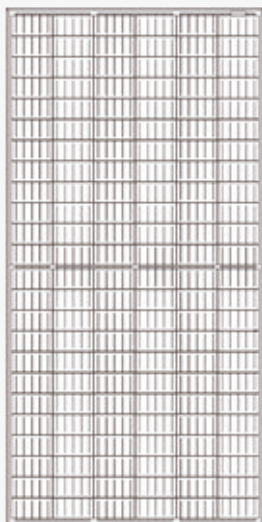
|           |                     |
|-----------|---------------------|
| L x W x H | 2008 x 1002 x 35 mm |
| Weight    | 23.5 kg with frame  |

### Mechanical load

|                                |                   |
|--------------------------------|-------------------|
| Design load (pressure/suction) | 1600 Pa / 1600 Pa |
| Test load (pressure/suction)   | 2400 Pa / 2400 Pa |

### Power connection

|                |   |
|----------------|---|
| Socket         | Protection Class IP68                           |
| Wire           | approx. 1.1 m, 4 mm <sup>2</sup>                |
| Plug-in system | Plug/socket IP68, Stäubli EVO2 / EVO2 pluggable |



All dimensions in mm

### Limit values

|  |            |
|--|------------|
| System voltage                             | 1500 VDC   |
| NOCT (nominal operating cell temperature)* | 45°C +/-2K |
| Reverse current feed IR                    | 20.0 A     |

### Permissible operating

|             |                              |
|-------------|------------------------------|
| temperature | -40°C to 85°C / -40F to 185F |
|-------------|------------------------------|

(No external voltages greater than U<sub>oc</sub> 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

### Temperature coefficients

|                         |           |
|-------------------------|-----------|
| Voltage U <sub>oc</sub> | -0.29 %/K |
| Current I <sub>sc</sub> | 0.04 %/K  |
| Output P <sub>mpp</sub> | -0.39 %/K |

### Low-light performance (Example for AC-415MH/144V)

| I-U characteristic curve | Current I <sub>pp</sub> | Voltage U <sub>pp</sub> |
|--------------------------|-------------------------|-------------------------|
| 200 W/m <sup>2</sup>     | 2.02 A                  | 40.40 V                 |
| 400 W/m <sup>2</sup>     | 4.08 A                  | 40.87 V                 |
| 600 W/m <sup>2</sup>     | 6.09 A                  | 41.19 V                 |
| 800 W/m <sup>2</sup>     | 8.05 A                  | 41.54 V                 |
| 1000 W/m <sup>2</sup>    | 9.89 A                  | 41.98 V                 |

### Packaging

|                                |     |
|--------------------------------|-----|
| Module pieces per pallet       | 30  |
| Module pieces per HC-container | 660 |