



**430 - 455 Wp**

**AXITEC**  
high quality german solar brand

## AXIpremium XL HC

High performance solar module  
144 halfcell, monocrystalline

The advantages:

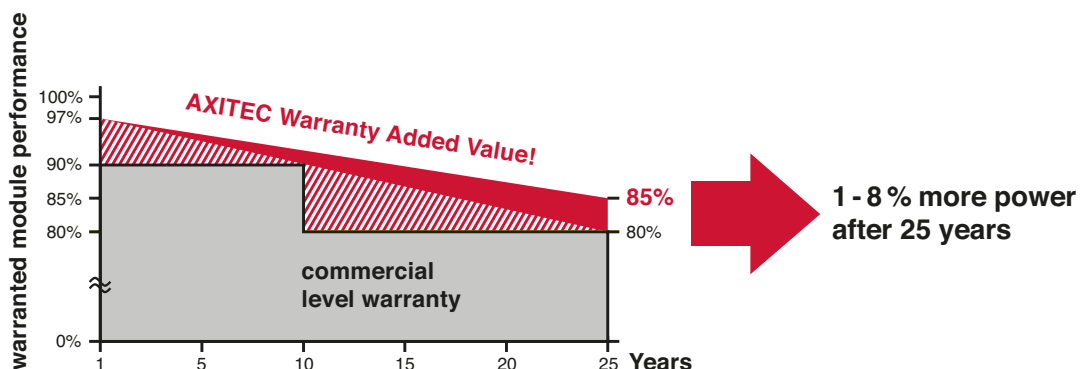
- 15** Years 15 years Manufacturer's warranty
- HC** High module performance through Half-Cut-technology and selected materials
- Wp** Guaranteed positive power tolerance from 0-5 Wp by individual measurement
- 100%** 100% visual electroluminescence inspection in production
- Frame** High stability due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



Fig. similar 144MHEN210209A

**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 XL HC 430 - 455 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 P <sub>mpp</sub>	Nominal voltage U <sub>mpp</sub>	Nominal current I <sub>mpp</sub>	Short circuit current I <sub>sc</sub>	Open circuit voltage U <sub>oc</sub>	Module conversion efficiency
AC-430MH/144V	430 Wp	40.59 V	10.60 A	11.21 A	49.22 V	19.78 %
AC-435MH/144V	435 Wp	40.79 V	10.67 A	11.28 A	49.42 V	20.01 %
AC-440MH/144V	440 Wp	40.99 V	10.74 A	11.35 A	49.62 V	20.24 %
AC-445MH/144V	445 Wp	41.19 V	10.81 A	11.41 A	49.86 V	20.47 %
AC-450MH/144V	450 Wp	41.39 V	10.88 A	11.48 A	50.10 V	20.70 %
AC-455MH/144V	455 Wp	41.61 V	10.94 A	11.54 A	50.34 V	20.93 %

### 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

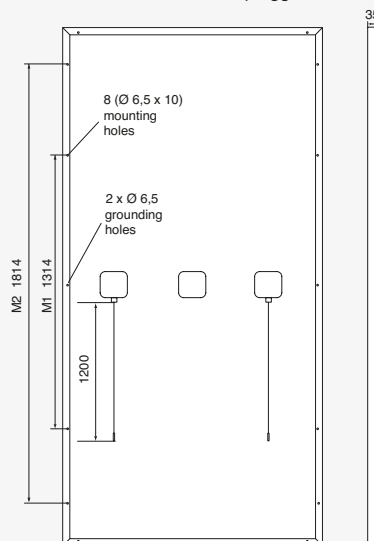
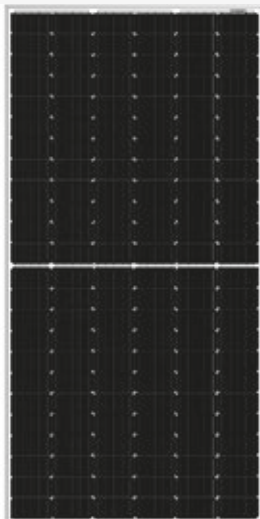
L x W x H	2094 x 1038 x 35 mm
Weight	23.8 kg with frame

### 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. 1.2 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>	-0.27 %/K
Current I <sub>sc</sub>	0.048 %/K
Output P <sub>mpp</sub>	-0.35 %/K

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

I-U characteristic curve	Current I <sub>pp</sub>	Voltage U <sub>pp</sub>
200 W/m <sup>2</sup>	2,24 A	40.05 V
400 W/m <sup>2</sup>	4,51 A	40.51 V
600 W/m <sup>2</sup>	6,74 A	40.82 V
800 W/m <sup>2</sup>	8,91 A	41.17 V
1000 W/m <sup>2</sup>	10,94 A	41.61 V

### Packaging

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