



440 - 465 Wp

**AXITEC**  
high quality german solar brand

**25**  
**YEARS**  
**85%**

## AXIpremium XL HC

High performance solar module  
144 halfcell, monocrystalline



German-Australian-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

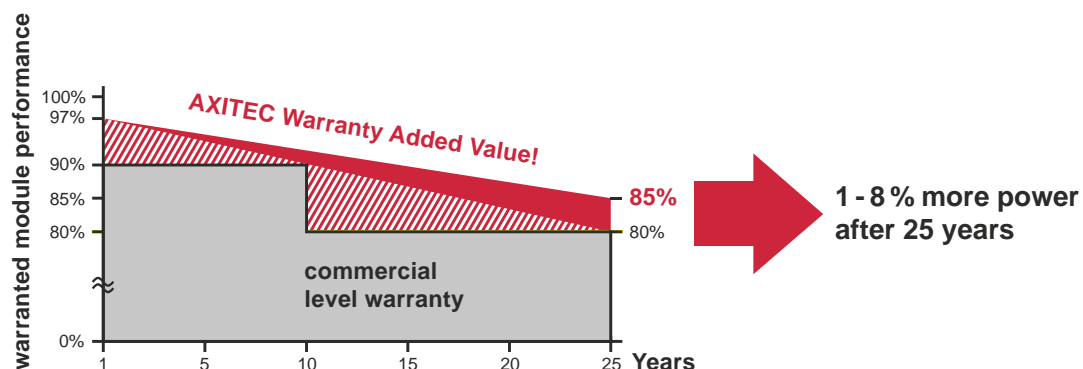


High quality junction box  
and connector systems



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



144MHEN210302A  
Fig. similar

## AXIpremium XL HC 440 - 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> (± 3 %)	Nominal voltage U <sub>mpp</sub> (± 2 %)	Nominal current I <sub>mpp</sub> (± 2 %)	Short circuit current I <sub>sc</sub> (± 2 %)	Open circuit voltage U <sub>oc</sub> (± 2 %)	Module conversion efficiency
AC-440MH/144VAU	440 Wp	41.20 V	10.68 A	11.40 A	49.00 V	20.24 %
AC-445MH/144VAU	445 Wp	41.40 V	10.75 A	11.45 A	49.10 V	20.47 %
AC-450MH/144VAU	450 Wp	41.60 V	10.82 A	11.52 A	49.40 V	20.70 %
AC-455MH/144VAU	455 Wp	41.80 V	10.89 A	11.58 A	49.60 V	20.93 %
AC-460MH/144VAU	460 Wp	42.00 V	10.96 A	11.65 A	49.80 V	21.16 %
AC-465MH/144VAU	465 Wp	42.10 V	11.05 A	11.74 A	49.90 V	21.39 %

### 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

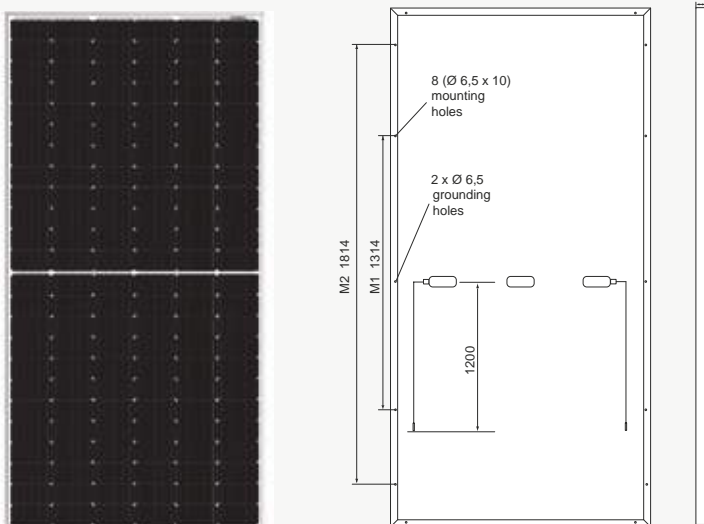
L x W x H	2094 x 1038 x 35 mm
Weight	23.5 kg with frame

### Mechanical load

Design load (pressure/suction)	3600 Pa / 1600 Pa
Test load (pressure/suction)	5400 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 MC4 PV-KST4-EVO 2 / PV-KBT4-EVO 2



All dimensions in mm

### Limit values

System voltage	1500 VDC
Module Fire Performance	CLASS C
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-465MH/144VAU)

I-U characteristic curve	Current I <sub>pp</sub>	Voltage U <sub>pp</sub>
200 W/m <sup>2</sup>	2.26 A	40.52 V
400 W/m <sup>2</sup>	4.56 A	40.98 V
600 W/m <sup>2</sup>	6.81 A	41.30 V
800 W/m <sup>2</sup>	9.00 A	41.66 V
1000 W/m <sup>2</sup>	11.05 A	42.10 V

### Packaging

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

country of origin:  
made in People's Republic of China