



440 - 450 Wp

AXITEC
high quality german solar brand

AXIworldpremium XL HC

High performance solar module
144 halfcell, monocrystalline

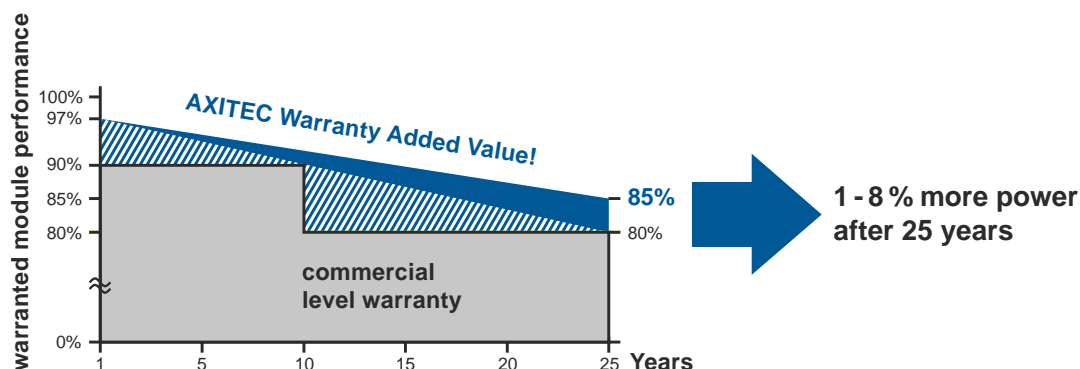
The advantages:

- 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
- 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



144MHEN210802E-26/2
Fig. similar

AXIworldpremium XL HC 440 - 450 Wp



Electrical data (at standard conditions (STC) irradiance 1000 watt/m², spectrum AM 1.5 at a cell temperature of 25°C)

Type	Nominal output P _{mpp}	Nominal voltage U _{mpp}	Nominal current I _{mpp}	Short circuit current I _{sc}	Open circuit voltage U _{oc}	Module conversion efficiency
AC-440MH/144V	440 Wp	40.99 V	10.74 A	11.35 A	49.62V	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 %

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

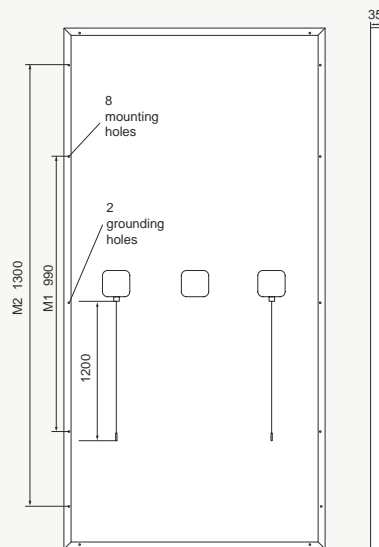
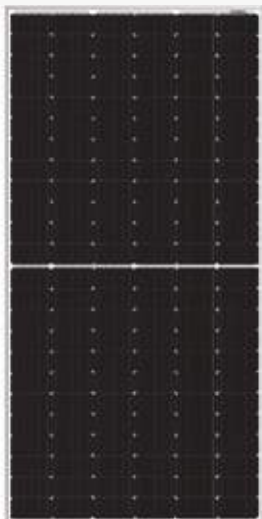
L x W x H	2094 x 1038 x 35 mm
Weight	23.8 kg with frame

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 ²
Plug-in system	Plug/socket IP68, 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_{oc} 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 U _{oc}	-0.27 %/K
Current I _{sc}	0.048 %/K
Output P _{mp}	-0.35 %/K

Low-light performance (Example for AC-450MH/144V)

I-U characteristic curve	Current I _{pp}	Voltage U _{pp}
200 W/m ²	2.22 A	39.83 V
400 W/m ²	4.49 A	40.29 V
600 W/m ²	6.70 A	40.61 V
800 W/m ²	8.86 A	40.96 V
1000 W/m ²	10.88 A	40.39 V