



430 - 460 Wp

AXIpremium XL HC

High performance solar module
144 halfcell, monocrystalline

The advantages:







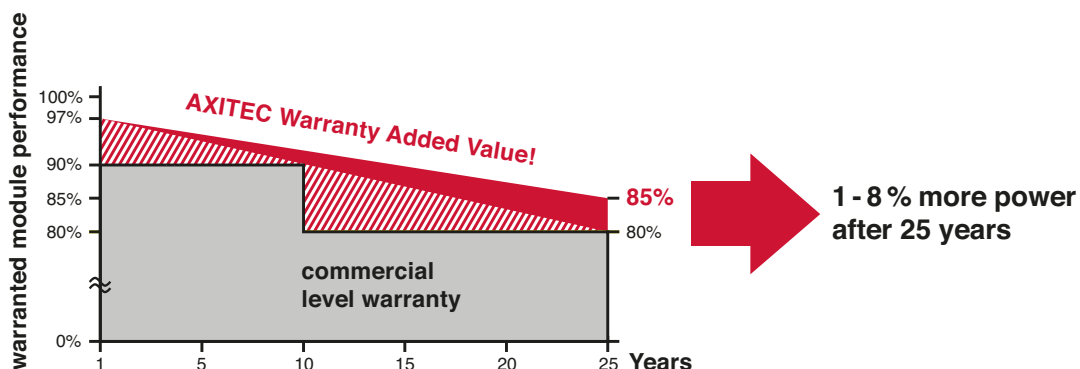
- 
15 years Manufacturer's warranty
- 
High module performance through Half-Cut-technology and selected materials
- 
Guaranteed positive power tolerance from 0-5 Wp by individual measurement
- 
100% visual electroluminescence inspection in production
- 
High stability due to innovative frame design
-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



Fig. similar 144MHEN20228A

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 - 460 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-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 %
AC-460MH/144V	460 Wp	42.00 V	10.96 A	11.65 A	50.40 V	21.16 %

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

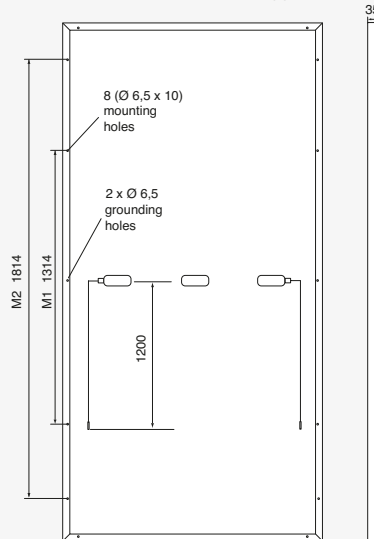
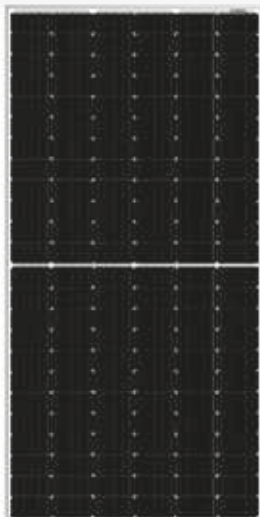
Mechanical load

Design load (pressure/suction)	3600 Pa / 1600 Pa *
Test load (pressure/suction)	5400 Pa / 2400 Pa *

* depending on the type of installation according to the installation instructions

Power connection

Socket	Protection Class IP68
Wire	approx. 1.2 m, 4 mm ²
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
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(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 _{mpp}	-0.35 %/K

Low-light performance (Example for AC-460MH/144V)

I-U characteristic curve	Current I _{pp}	Voltage U _{pp}
200 W/m ²	2.24 A	40.42 V
400 W/m ²	4.52 A	40.89 V
600 W/m ²	6.75 A	41.21 V
800 W/m ²	8.93 A	41.56 V
1000 W/m ²	10.96 A	42.00 V

Packaging

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