



525 - 545 Wp

AXITEC
high quality german solar brand

AXIpremium XXL HC

High performance solar module
144 halfcell, monocrystalline

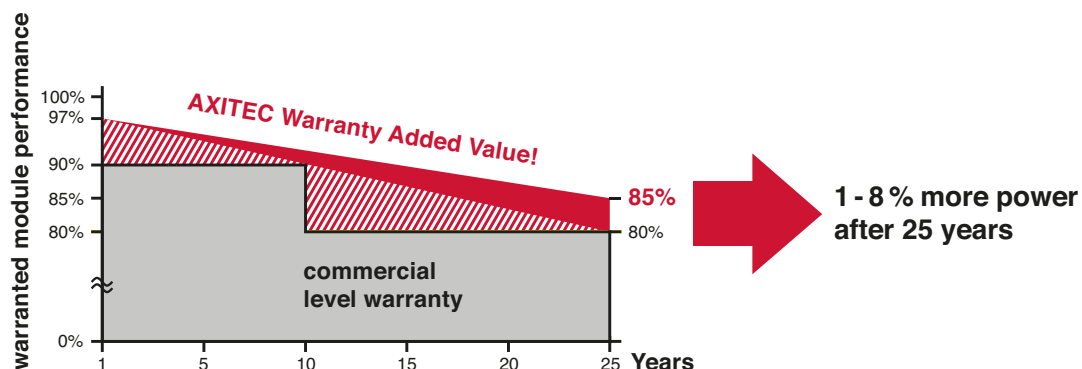
The advantages:

- 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



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 XXL HC 525 - 545 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-525MH/144V | 525 Wp | 41.25 V | 12.73 A | 13.66 A | 49.10 V | 20.31 % |
| AC-530MH/144V | 530 Wp | 41.40 V | 12.81 A | 13.73 A | 49.25 V | 20.51 % |
| AC-535MH/144V | 535 Wp | 41.55 V | 12.88 A | 13.79 A | 49.40 V | 20.70 % |
| AC-540MH/144V | 540 Wp | 41.70 V | 12.95 A | 13.85 A | 49.55 V | 20.89 % |
| AC-545MH/144V | 545 Wp | 41.85 V | 13.03 A | 13.91 A | 49.70 V | 21.09 % |

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 | 2279 x 1134 x 35 mm |
| Weight | 28.5 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. 1.3 m, 4 mm ² |
| Plug-in system | Plug/socket IP68, Stäubli EVO2 / EVO2 pluggable |

Limit values

| | |
|--|------------|
| System voltage | 1500 VDC |
| NOCT (nominal operating cell temperature)* | 45°C +/-2K |
| Reverse current feed IR | 25.0 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

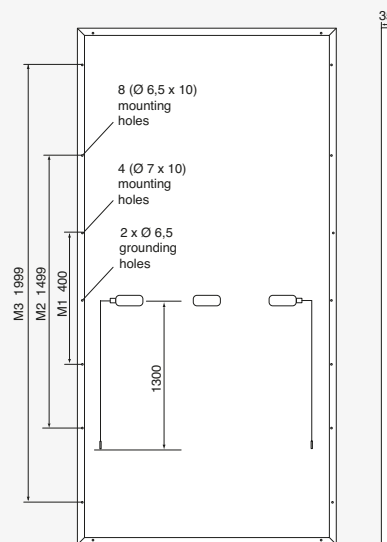
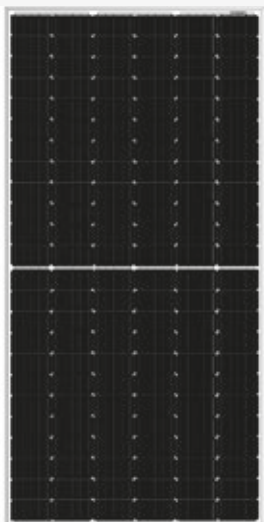
| | |
|-------------------------|-----------|
| Voltage U _{oc} | -0.28 %/K |
| Current I _{sc} | 0.045 %/K |
| Output P _{mpp} | -0.35 %/K |

Low-light performance (Example for AC-545MH/144V)

| I-U characteristic curve | Current I _{pp} | Voltage U _{pp} |
|--------------------------|-------------------------|-------------------------|
| 200 W/m ² | 2.66 A | 40.28 V |
| 400 W/m ² | 5.37 A | 40.74 V |
| 600 W/m ² | 8.03 A | 41.06 V |
| 800 W/m ² | 10.61 A | 41.41 V |
| 1000 W/m ² | 13.03 A | 41.85 V |

Packaging

| | |
|--------------------------------|-----|
| Module pieces per pallet | 30 |
| Module pieces per HC-container | 600 |



All dimensions in mm