

AXIbipremium XXL HC MT 530 - 555 Wp

High performance bifacial solar module
144 halfcell, monocrystalline

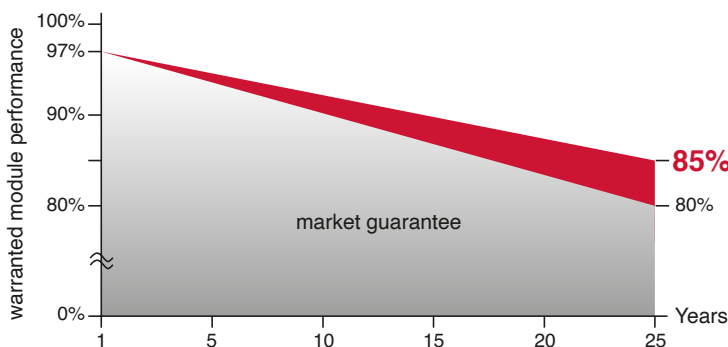
25
YEARS
85%

The advantages:

- 15** Years 15 years Manufacturer's warranty
- +25%** Up to 25 % more power output by Bifacial-Technology
- + 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
- 25** Years 25 years Performance guarantee



Exclusive linear AXITEC high performance guarantee!



85% AXITEC Warranty Added Value:
up to 5% more power after 25 years

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

Type	AC-530MBT/144V	AC-535MBT/144V	AC-540MBT/144V	AC-545MBT/144V	AC-550MBT/144V	AC-555MBT/144V
Nominal output	530 Wp	535 Wp	540 Wp	545 Wp	550 Wp	555 Wp
Nominal voltage U _{mpp}	41.40 V	41.55 V	41.70 V	41.80 V	41.96 V	42.11 V
Nominal current I _{mpp}	12.81 A	12.88 A	12.95 A	13.04 A	13.11 A	13.18 A
Short circuit current I _{sc}	13.73 A	13.79 A	13.85 A	13.93 A	14.00 A	14.07 A
Open circuit voltag U _{oc}	49.25 V	49.40 V	49.55 V	49.75 V	49.90 V	50.05 V
Module conversion efficiency	20.52 %	20.71 %	20.90 %	21.09 %	21.29 %	21.48 %

Bifacial output - Backside Power gain

10% Power output	583.00 Wp	588.50 Wp	594.00 Wp	599.50 Wp	605.00 Wp	610.50 Wp
Module Efficiency	22.57 %	22.78 %	22.99 %	23.20 %	23.41 %	23.62 %
15% Power output	609.50 Wp	615.25 Wp	621.00 Wp	626.75 Wp	632.50 Wp	638.25 Wp
Module Efficiency	23.59 %	23.82 %	24.04 %	24.25 %	24.47 %	24.70 %
20% Power output	636.00 Wp	642.00 Wp	648.00 Wp	654.00 Wp	660.00 Wp	666.00 Wp
Module Efficiency	24.62 %	24.85 %	25.08 %	25.31 %	25.54 %	25.77 %
25% Power output	662.50 Wp	668.85 Wp	675.00 Wp	681.25 Wp	687.50 Wp	693.75 Wp
Module Efficiency	25.65 %	25.89 %	26.13 %	26.36 %	26.60 %	26.84 %

Design

Frontside	3.2 mm hardened, low-reflection white glass
Backside	Composite film, cell gaps transparent
Cells	144 bifacial-monocrystalline high efficiency cells
Frame	35 mm silver aluminium frame

Mechanical data

L x W x H	2278 x 1134 x 35 mm
Weight	28.5 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. 1.3 m, 4 mm ²
Plug-in system	Plug/socket IP68, JM608

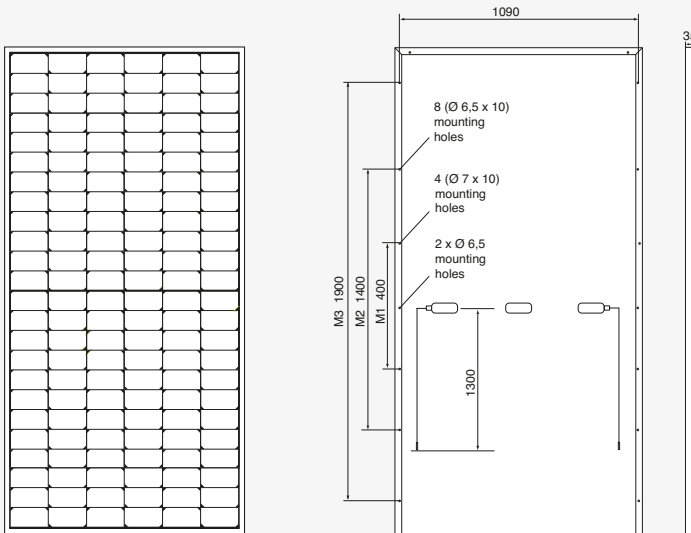


Fig. principle sketch

All dimensions in mm

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

Bifaciality 70 % ± 10 %

(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}	-0.29 %/K
Current I _{sc}	0.048 %/K
Output P _{mpp}	-0.35 %/K

Low-light performance without Bifacial-effect

(Example for AC-555MBT/144V)

I-U characteristic curve	Current I _{pp}	Voltage U _{pp}
200 W/m ²	2.69 A	40.53 V
400 W/m ²	5.43 A	40.99 V
600 W/m ²	8.12 A	40.31 V
800 W/m ²	10.73 A	41.67 V
1000 W/m ²	13.18 A	42.11 V

Packaging

Module pieces per pallet	31
Module pieces per HC-container	620

