



**290 - 310 Wp**

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**AXITEC**  
high quality german solar brand

## **AXIblackpremium**

**60 cell monocrystalline  
High performance solar module**

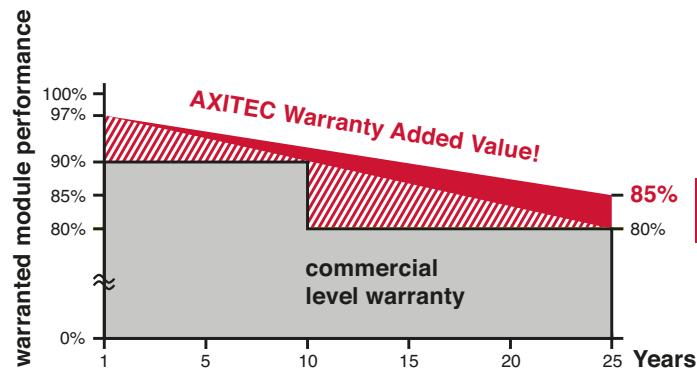
### **The advantages:**

- 15 Years** 15 years manufacturer's warranty
- P-Max** Highest performance due to specifically selected technologies and materials
- +/- Wp** Guaranteed positive power tolerance from 0-5 Wp by individual measurement
- 5.400 Pa** Maximum 5400 Pa snow load
- 100%** 100% electroluminescence inspection
- Soft Grip** High stability due to AXITEC-Soft-Grip-Seam aluminium frame construction
- IP 67** 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



60MEN190724A

Fig. similar

# AXIblackpremium 290 - 310 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<br>Pmpp | Nominal voltage<br>Umpp | Nominal current<br>Impp | Short circuit current<br>Isc | Open circuit voltage<br>Uoc | Module conversion<br>efficiency |
|-------------|------------------------|-------------------------|-------------------------|------------------------------|-----------------------------|---------------------------------|
| AC-290M/60S | 290 Wp                 | 32,01 V                 | 9,06 A                  | 9,54 A                       | 39,42 V                     | 17,83 %                         |
| AC-295M/60S | 295 Wp                 | 32,25 V                 | 9,15 A                  | 9,67 A                       | 39,56 V                     | 18,13 %                         |
| AC-300M/60S | 300 Wp                 | 32,37 V                 | 9,27 A                  | 9,74 A                       | 39,72 V                     | 18,44 %                         |
| AC-305M/60S | 305 Wp                 | 32,41 V                 | 9,42 A                  | 9,83 A                       | 39,81 V                     | 18,75 %                         |
| AC-310M/60S | 310 Wp                 | 32,51 V                 | 9,54 A                  | 9,94 A                       | 39,94 V                     | 19,05 %                         |

## Design

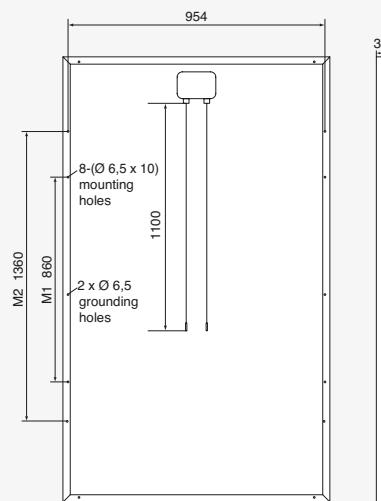
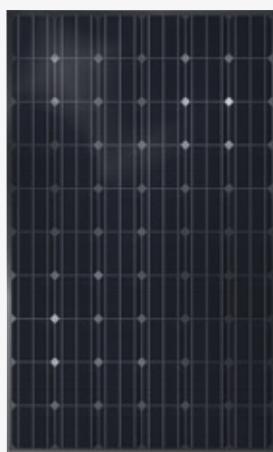
|           |   |
|-----------|---|
| Frontside | 3,2 mm hardened, low-reflection white glass |
| Cells     | 60 monocrystalline high efficiency cells    |
| Backside  | Composite film                              |
| Frame     | 35 mm black aluminium frame                 |

## Mechanical data

|           |                    |
|-----------|--------------------|
| L x W x H | 1640 x 992 x 35 mm |
| Weight    | 18,0 kg with frame |

## Power connection

|                |   |
|----------------|---|
| Socket         | Protection Class IP67 (3 bypass diodes) |
| Wire           | approx. 1,1 m, 4 mm <sup>2</sup>        |
| Plug-in system | Plug/socket IP67                        |



All dimensions in mm

## Limit values

|  |  |
|--|--|
| System voltage                             | 1000 VDC   |
| NOCT (nominal operating cell temperature)* | 45°C +/-2K   |
| Max. load-carrying capacity                | 5400 N/m <sup>2</sup>  |
| Reverse current feed IR                    | 20,0 A   |
| Permissible operating temperature          | -40°C to 85°C / -40F to 185F<br>(No external voltages greater than Uoc 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 Uoc | -0,29 %/K |
| Current Isc | 0,04 %/K  |
| Output Pmpp | -0,39 %/K |

## Low-light performance (Example for AC-300M/60S)

| I-U characteristic curve | Current Ipp | Voltage Upp |
|--------------------------|-------------|-------------|
| 200 W/m <sup>2</sup>     | 2,15 A      | 30,17 V     |
| 400 W/m <sup>2</sup>     | 3,71 A      | 31,20 V     |
| 600 W/m <sup>2</sup>     | 6,05 A      | 31,81 V     |
| 800 W/m <sup>2</sup>     | 7,57 A      | 32,10 V     |
| 1000 W/m <sup>2</sup>    | 9,27 A      | 32,37 V     |

## Packaging

|                                |     |
|--------------------------------|-----|
| Module pieces per pallet       | 30  |
| Module pieces per HC-container | 840 |