



# **AXI**blackpremium

60 cell monocrystalline, 1000 V High performance solar module

## German engineered - made for America



15 years manufacturer's warranty
Two more years than industry standard



Highest performance due to specifically selected technologies and materials



Positive power tolerance from 0-5 Wp Higher guaranteed yield



Snow load of up to 113 psf Stable module for a long life in extreme conditions



100 % electroluminescence inspection Micro crack and hotspot free modules



Axitec-Soft-Grip-Seam aluminum frame Higher stability and easier handling



High quality junction box and connector system for a longer life time

### **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





(Photovoltaic Module over 600 Volts) E487509





www.axitecsolar.us

# **AXIblackpremium** 280 - 300 Wp

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

Туре	Nominal output Pmpp	Nominal voltage Umpp	Nominal current Impp	Short circuit current lsc	Open circuit voltage Uoc	Module conversion efficiency
AC-280M/60S	280 Wp	31.68 V	8.84 A	9.36 A	39.05 V	17.21 %
AC-285M/60S	285 Wp	31.81 V	8.96 A	9.43 A	39.24 V	17.52 %
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	9.17 A	9.68 A	39.56 V	18.13 %
AC-300M/60S	300 Wp	32.37 V	9.29 A	9.75 A	39.72 V	18.44 %

#### Design

Frontside 0.13 inch (3.2 mm) hardened, low-reflection white glass

Cells 60 monocrystalline high efficiency cells 6 inch (156 x 156 mm)

Backside Composite film

Frame 1.38 inch (35 mm) black anodized aluminium frame

#### Mechanical data

L x W x H 64.57 x 39.06 x 1.38 inch (1640 x 992 x 35 mm)

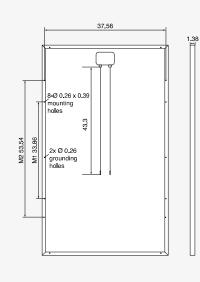
Weight 39.68 lbs (18.0 kg) with frame

#### Power connection

Socket Protection Class IP67 (3 bypass diodes)

Wire 43.3 inch, AWG 11
Plug-in system Plug/socket IP67





All dimensions in inch

#### Limit values

System voltage 1000 VDC (UL) 1000 VDC (IEC)

Module Fire Performance TYPE 1 (UL 1703)

or CLASS C (IEC 61730)

NOCT (nominal operating cell temperature)\* 45°C +/-2K Max. load-carrying capacity 113 PSF Reverse current feed IR 20.0 A

Reverse current feed IR
Permissible operating

temperature -40°C to 85°C / -40F to 185F

(No external voltages greater than Vo 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 Uoc
 -0.30 %/K

 Current Isc
 0.04 %/K

 Output Pmpp
 -0.40 %/K

#### Low-light performance (Example for AC-280M/60S)

I-U characteristic curve	Current lpp	Voltage Up
200 W/m <sup>2</sup>	2.06 A	29.55 V
400 W/m <sup>2</sup>	3.55 A	30.56 V
600 W/m <sup>2</sup>	5.08 A	31.15 V
800 W/m <sup>2</sup>	7.25 A	31.44 V
1000 W/m <sup>2</sup>	8.84 A	31.68 V

#### Packaging

Module pieces per pallet 30

Module pieces per HC-container 840

Technical data are subject to change without prior notice, errors excepted.

The measurement tolerances are +/-3%