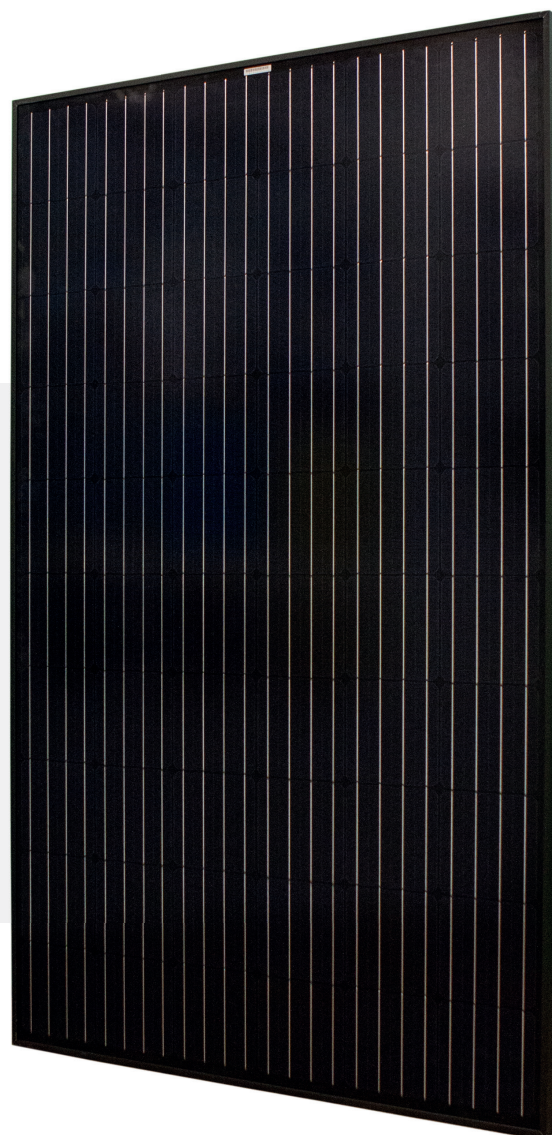


# A-EXM MONO ALL BLACK MONOCRYSTALLINE 60 CELLS

**OUTPUT:**  
**300-320 WATT**

EXE high efficiency all black mono-crystalline 60-cell series combines visual attractiveness to high performance. This series features black back sheet, a 3.5 mm black anodized aluminium frame, which combines robustness to light weight, and a 3.2 mm anti-reflective glass optimizing panel performance to solar irradiance.



Guaranteed positive output  
tolerance of 0/+5 Wp by single  
measuring



Maximum 5400 N/m<sup>2</sup> snow  
load



3,2 mm anti-reflective glass



Maximum stability through  
aluminium frame Soft-Grip



15 years manufacturer's warranty  
25 years linear performance guarantee

# A-EXM MONO ALL BLACK

## MONOCRYSTALLINE 60 CELLS



| Type                                  | A-EXM 300/156-60 | A-EXM 310/156-60 | A-EXM 320/156-60 |
|---------------------------------------|------------------|------------------|------------------|
| Nominal output P <sub>mp</sub>        | 300Wp            | 310Wp            | 320Wp            |
| Nominal voltage U <sub>mp</sub>       | 32,10V           | 32,42V           | 40,80V           |
| Nominal current I <sub>mp</sub>       | 9,41A            | 9,60A            | 9,56A            |
| Short circuit current I <sub>sc</sub> | 9,97A            | 9,58A            | 10,05A           |
| Open circuit voltage U <sub>oc</sub>  | 39,80V           | 40,02V           | 33,48V           |
| Module with version efficiency        | 18,35%           | 19,07%           | 19,06%           |

Electrical characteristics (at Standard Test Conditions (STC) of irradiance 1000W/m<sup>2</sup>, spectrum AM 25°C)

| Design    |                                                                      |
|-----------|----------------------------------------------------------------------|
| Frontside | 3,2 mm anti-reflective glass                                         |
| Cells     | 60 cells monocrystalline high efficiency cells 157x157 mm di 6" -5BB |
| Backside  | Composite film black                                                 |
| Frame     | 35mm black anodized aluminium frame                                  |

| Power with nection |                                             |
|--------------------|---------------------------------------------|
| Socket             | Protection class IP 67<br>(3 bypass diodes) |
| Wire               | Approx 110 cm / 4 mm <sup>2</sup>           |
| Plug-in system     | Plug / Socket IP 67                         |

\*NOCT, irradiance 800 W/m<sup>2</sup>; AM 1.5; wind speed 1 m/sec; Temperature 20°C)

| Mechanical data |                    |
|-----------------|--------------------|
| LxWxH           | 1650 x 992 x 35 mm |
| Weight          | 19,5 kg with Frame |

| Temperature coefficient  |          |
|--------------------------|----------|
| Voltage U <sub>oc</sub>  | -0,30%/K |
| Corrente I <sub>SC</sub> | +0,04%/K |
| Output P <sub>mp</sub>   | -0,42%/K |

| Limit values                |                       |
|-----------------------------|-----------------------|
| System voltage              | 1500 VDC              |
| NOCT*                       | 45°C +/- 2K           |
| Max. load-carrying capacity | 5400 N/m <sup>2</sup> |
| Reverse current feed IR     | 16,0 A                |

