AE POWER PLUS PV MODULES

tested by Fraunhofer CSP

tp magazine 2018

top innovation
AE Solar PowerPlus
MONOCRYSTALLINE PV MODULES
AE M6-60 Series 285W-310W

Inspiring green-energy since 2003

PERC Technology

60 CELLS
MICRO-Crack FREE
PID RESISTANT
SALT CORROSION RESISTANT
SAND RESISTANT
AMMONIA RESISTANT
HIGHLY STABLE AND TOUGH

GERMAN QUALITY
AE Solar photovoltaic modules are produced using high quality materials, automated robotic lines, German technology and standards.

PERFORMANCE GUARANTEE
AE Solar assures high investment, security and warranty claims by providing linear performance guarantee of 30 years and 12 years of product warranty.

PLUS-SORTING
Higher yield due to plus-sorting from 0 up to +5 Wp guarantees the high system efficiency and yield stability.

CERTIFICATES
Lining with international standards, AE Solar Photovoltaic modules are tested and certified under extreme stress conditions and it can bear harsh environment influences.

OUR PERFORMANCE GUARANTEE

<table>
<thead>
<tr>
<th>Years</th>
<th>AE Solar PowerPlus</th>
<th>Commercial Guarantee</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>97%</td>
<td>80%</td>
</tr>
<tr>
<td>5</td>
<td>90%</td>
<td>85%</td>
</tr>
<tr>
<td>10</td>
<td>90%</td>
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<tr>
<td>15</td>
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<tr>
<td>20</td>
<td>90%</td>
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<td>25</td>
<td>90%</td>
<td>85%</td>
</tr>
<tr>
<td>30</td>
<td>90%</td>
<td>85%</td>
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30 years Performance Guarantee
12 years Product Warranty

Deutsche Qualität Garantiert
**SPECIFICATIONS**

<table>
<thead>
<tr>
<th>AE285M6-60</th>
<th>AE290M6-60</th>
<th>AE295M6-60</th>
<th>AE300M6-60</th>
<th>AE305M6-60</th>
<th>AE310M6-60</th>
</tr>
</thead>
<tbody>
<tr>
<td>Nominal Max. Power</td>
<td>Pmax (Wp)</td>
<td>285</td>
<td>290</td>
<td>295</td>
<td>300</td>
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<tr>
<td>Maximum power voltage</td>
<td>Vmp(V)</td>
<td>32.34</td>
<td>32.76</td>
<td>33.18</td>
<td>33.59</td>
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<tr>
<td>Maximum power current</td>
<td>Imp (A)</td>
<td>8.81</td>
<td>8.85</td>
<td>8.89</td>
<td>8.93</td>
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<tr>
<td>Open-circuit voltage</td>
<td>Voc(V)</td>
<td>38.73</td>
<td>38.94</td>
<td>39.15</td>
<td>39.36</td>
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<tr>
<td>Module efficiency (%)</td>
<td></td>
<td>17.41</td>
<td>17.72</td>
<td>18.02</td>
<td>18.33</td>
</tr>
<tr>
<td>Power tolerance</td>
<td>Pmax (Wp)</td>
<td>0 / + 5</td>
<td></td>
<td></td>
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<tr>
<td>Maximum system voltage DC (V)</td>
<td></td>
<td>1000</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Operating temperature (°C)</td>
<td></td>
<td>-40 to +85</td>
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<td></td>
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<tr>
<td>Temp. coefficients of Pmax (%/°C)</td>
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<td>-0.38</td>
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<tr>
<td>Temp. coefficients of Voc (%/°C)</td>
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<td>-0.29</td>
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<td>Temp. coefficients of Isc (%/°C)</td>
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<td>0.050</td>
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<td>Nom. Operating cell temp.(NOCT) (°C)</td>
<td></td>
<td>45±2</td>
<td></td>
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</table>

The electrical data apply to standard test conditions (STC): Irradiance of 1000 W/m² with spectrum AM 1.5 and a cell temperature of 25°C.

**MATERIAL CHARACTERISTICS**

- Cell type: Mono-crystalline 156 x 156mm
- No. of cells: 60 (6 x 10)
- Dimensions: 1650 x 992 x 35mm
- Weight: 18.5 kg
- Junction box: IP 67 rated
- Output cable: 1 x 4.0mm², 900mm length or customised
- Connector type: MC 4 / MC 4 compatible
- Hail resistance: Max. Ø 28 mm, at 23 m/s
- Wind load: 2400 Pa / 244 kg/m²
- Mechanical load: 5400 Pa / 550 kg/m²

**PACKAGING INFORMATION**

- Packing configuration: 64 pcs / double pallet
- Loading Capacity: 896 pcs / 40HQ
- Size / pallet (mm): 1690 x 1135 x 2325
- Weight: 1260 kg / pallet

**DIMENSIONS**

[Dimensions diagram]

**CERTIFICATES**

- SGS TÜV SAAR
- IEC 61215 PERIODICAL INSPECTION
- PID RESISTANT
- SALT MIST RESISTANT
- SAND RESISTANT
- CORROSIVE GAS (NHS)
- CE
- CHUBB INSURANCE
- TÜV SW

AES-DSH2018 V.001
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