

AEG

PHOTOVOLTAIC MODULE AS-M1443 (M6 CELLS)



445- 455 Wp
144 MONOCRYSTALLINE HALF-CUT CELLS

AEG solar modules combine the most advanced technology with high reliability in manufacture to offer you a product meant for high achievements.



OPTIMIZED DESIGN
MAXIMUM EFFICIENCY

AEG solar modules with half-cut cells (M6) and 9 busbar technology are designed to maximize efficiency and plant performance. The extra-long cables allow more installation flexibility and comfort.



EXTENSIVE WARRANTIES,
EXTRA PEACE OF MIND

Thanks to their outstanding manufacturing quality, AEG High Efficiency modules (glass-backsheet) are covered by 15 years warranty on the product and 25 years warranty on performance. For extra peace of mind, product warranty can optionally be extended to 20 years.

COMPREHENSIVELY CERTIFIED

AEG solar modules and production facilities are compliant with the the latest standards to guarantee safety and reliability. Production facilities are certified according to ISO 9001, ISO 14001 and OHSAS 18001. AEG solar products are certified among others by:



www.aeg-industrialsolar.de

HIGH EFFICIENCY SERIES



PRODUCT NAMECODE (PNC)

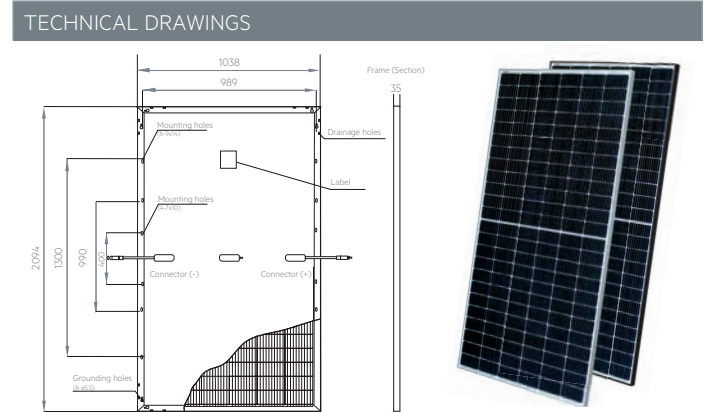
AS-M1443-H(M6)-445/450/455, silver frame
AS-M1443Z-H(M6)-445/450/455, black frame

| PRODUCT SERIES & NAMECODE (PNC) | |
|--|--|
| AEG HIGH EFFICIENCY SERIES | |
| AS-M1443-H(M6)-445/450/455, silver frame | |
| AS-M1443Z-H(M6)-445/450/455, black frame | |

| CERTIFICATIONS | |
|----------------|----------------------------------|
| System | ISO 9001, ISO 14001, OHSAS 18001 |
| Product | IEC 61215-1/-2:2016 (EN: 2017) |
| | IEC 61730-1/-2:2016 (EN: 2018) |



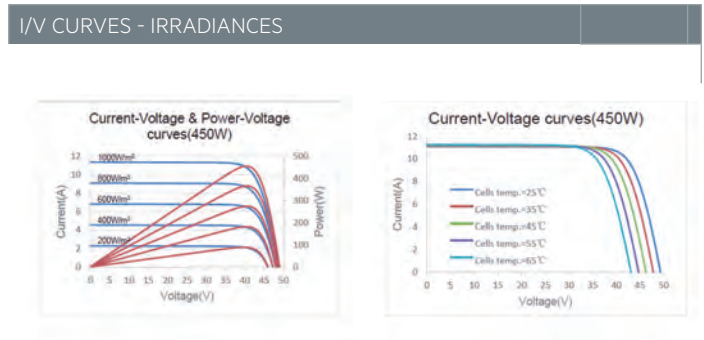
| ELECTRICAL CHARACTERISTICS AT STC ^{1,2} | | | | |
|--|------|--------|--------|--------|
| Nominal Power (Pmax) | [Wp] | 445 | 450 | 455 |
| Power Sorting ³ | [Wp] | -0/+5 | -0/+5 | -0/+5 |
| Maximum Power Voltage (Vmp) | [V] | 41,05 | 41,32 | 41,51 |
| Maximum Power Current (Imp) | [A] | 10,84 | 10,89 | 10,96 |
| Open Circuit Voltage (Voc) | [V] | 48,8 | 49,05 | 49,35 |
| Short Circuit Current (Isc) | [A] | 11,3 | 11,37 | 11,44 |
| Module Efficiency (ηm) | [%] | 20,50% | 20,70% | 20,90% |
| Maximum System Voltage | [V] | 1000 | 1000 | 1000 |
| Series Fuse Maximum Rating | [A] | 20 | 20 | 20 |



| ELECTRICAL CHARACTERISTICS AT NMOT ⁴ | | | | |
|---|-----|-------|-------|-------|
| Maximum Power (Pmax) | [W] | 330,8 | 334,5 | 338,2 |
| Maximum Power Voltage (Vmp) | [V] | 38,12 | 38,37 | 38,55 |
| Maximum Power Current (Imp) | [A] | 8,68 | 8,72 | 8,78 |
| Open Circuit Voltage (Voc) | [V] | 45,7 | 45,94 | 46,22 |
| Short Circuit Current (Isc) | [A] | 9,1 | 9,16 | 9,22 |

| TEMPERATURE CHARACTERISTICS | | |
|-----------------------------|--------|---------|
| NMOT | [°C] | 41± 2 |
| Pmax Temp. Coefficient (γ) | [%/°C] | -0.35 |
| Voc Temp. Coefficient (β) | [%/°C] | -0.27 |
| Isc Temp. Coefficient (α) | [%/°C] | +0.05 |
| Operating temperature | [°C] | -40~+85 |

| MECHANICAL CHARACTERISTICS | | |
|----------------------------|---|------------------------|
| Solar cells | monocrystalline silicon, half-cut [pcs] | 144 |
| | Dimensions [mm] | M6 Half-cut [166 x 83] |
| Front glass | high-transparency | Transparent |
| | Thickness [mm] / [in] | 3,2 / 0,126 |
| Backsheet | White | |
| Encapsulant | EVA | Transparent |
| Frame | Anodized aluminum alloy | Silver or black |
| Junction box | Standard | IP68 |
| | Bypass diodes | 3 |
| UV-resistant cables | Length [mm] / [in] | 1300 / 51,18 |
| | Section [mm²] | 4 |
| Connectors | MC4 | compatible |
| Dimensions | H x L x W [mm] | 2094 x 1038 x 35 |
| | H x L x W [in] | 82,44 x 40,86 x 1,37 |
| Weight | [kg] / [lbs] | 23 / 50,69 |
| Maximum load | Wind / Snow [Pa] | 2400 / 5400 |



| WARRANTIES | | |
|--|---------|----------------------|
| Product warranty | [years] | 15 (opt. ext. to 20) |
| Performance warranty (linear) ⁵ | [years] | 25 |

| PACKAGING | | |
|-----------------------|-----------------------|-----|
| Packing configuration | [pcs/pallet] | 31 |
| Loading capacity | [pcs/40 ft container] | 682 |

CONTACT US

Solar Solutions GmbH

Brückenstrasse 94, 60594 Frankfurt am Main, Germany

+49 (0)69 400500810 | info@aeg-industrialsolar.de

www.aeg-industrialsolar.de

1-Standard Test Conditions (STC): Irradiance 1000 W/m², Air Mass AM = 1.5, Cell Temperature 25°C

2-Measurement tolerances (IEC 61215:2016): Pmax±3%, Voc±3%, Isc±5%

3-AEG photovoltaic modules are classified according to a principle of positive power tolerance: the Power Output measured at STC of the delivered modules exceeds their assigned Nameplate Nominal Power

4-NMOT: Nominal operating temperature of module, Irradiance 800 W/m², Wind Speed 1m/s, Ambient Temperature 20°C, Air Mass AM-1.5

5-(HE/G8) No less than 98% of the minimum "Peak Power at STC" in the first year, power output decline no more than 0.55% per year thereafter. Full text of the Warranty Terms available at: www.aeg-industrialsolar.de

6-Dimensions in the technical picture are expressed in mm with tolerance ±2 mm (±0.079")

Version 2021.08.V2.EN

© Solar Solutions GmbH. Specifications in this datasheet are subject to change without notice.

AEG is a registered trademark used under license from AB Electroflux (pub).