



445 - 455 Wp 120 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 130 cm extra-long cables allow more installation flexibility



CAREFUL SELECTION, PREMIUM LOOK

The careful selection of components (cells, backsheet and frames) ensures a premium product look and provides extra aesthetical value.

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:



YOUR ADVANTAGE AT A GLANCE

Premium solar panel with quality components
High efficiency - up to 455 Wp
Product certified IEC 61215:2016, IEC 61730:2016
12 years Product warranty
25 years linear Power warranty



ELECTRICAL CHARACTERISTICS AT STC¹

		AS-M1443-H-445	AS-M1443-H-450	AS-M1443-H-455
Nominal Power (Pmax)	[Wp]	445	450	455
Power Sorting ²	[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]	48.80	49.05	49.35
Short Circuit Current (Isc)	[A]	11.30	11.37	11.44
Module Efficiency (ηm)		20.1%	20.4%	20.6%
Maximum System Voltage	[V]	1000	1000	1000
Series Fuse Maximum Rating	[A]	20	20	20

ELECTRICAL CHARACTERISTICS NMOT³

		AS-M1443-H-445	AS-M1443-H-450	AS-M1443-H-455
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]	45.70	45.94	46.22
Short Circuit Current (Isc)	[A]	9.10	9.16	9.22

MECHANICAL CHARACTERISTICS

Solar cells	144 [(6 x 12) x 2] monocrystalline silicon, 166 x 83 mm (M6) half-cut cells
Front glass	3.2 mm (0.12") high-transparency glass
Backsheet	White backsheet
Encapsulant	EVA (Ethylene-Vinyl Acetate)
Frame	Anodized aluminum alloy, silver or black color („zebra“)
Junction box	IP68, 3 bypass diodes
Cables	UV resistant cable 130 cm (51.18"), sec.4.0 mm ²
Connectors	MC4 compatible connectors
Dimensions	2108 mm x 1048 mm x 35 mm (83" x 41.25" x 1.38")
Weight	24 kg (52.9 lbs)
Maximum load	Wind: 2400 Pa / Snow: 5400 Pa

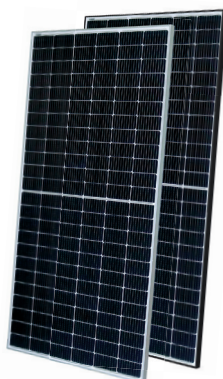
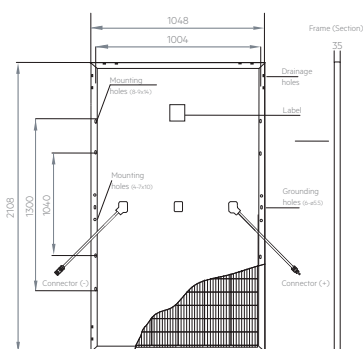
TEMPERATURE CHARACTERISTICS

NOCT	44°C ± 2°C
Pmax Temp. Coefficient (γ)	-0.35 %/C
Voc Temp. Coefficient (β)	-0.28 %/C
Isc Temp. Coefficient (α)	0.04 %/C
Operating temperature	-40°C to + 85°C

PACKING CONFIGURATION

Packing configuration	31 pcs / pallet
Loading capacity	791 pcs / 40 ft container

TECHNICAL DRAWINGS



Module dimensions in the technical picture are expressed in mm with tolerance ±2 mm (±0.079")

1- Standard Test Conditions (STC): Irradiance 1000 W/m²; Air Mass AM = 1.5; Cell Temperature 25°C; Tolerance on Pmax ± 3%; Tolerance on Voc ± 3%; Tolerance on Isc ± 5%

2- 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 at STC within a power tolerance range between -0 Wp and +5 Wp.

3- Nominal Module Operating Temperature (NMOT): Irradiance 800 W/m²; Wind Speed 1m/s; Ambient Temperature 20°C; Air Mass AM=1.5

4- No less than 97% of the minimum "Peak Power at STC" in the first year; power output decline no more than 0.7% per year thereafter). Full text of the Warranty Terms available at: www.aeg-industrialsolar.de

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WARRANTIES

Product warranty	12 years
Performance warranty	25 years, linear ⁴

I-V CURVES / IRRADIANCES

