



AEG HIGH EFFICIENCY SERIES

AS-M1203-H(M10) / HALF-CUT CELLS PHOTOVOLTAIC MODULE

CHARACTERISTICS

Power range: 450-460 Wp
Half-Cut-cell technology
Suitable for: residential / commercial installations



EXTRA PEACE OF MIND

Extensive certifications and rigorous Quality Control
25 years product warranty
25 years performance warranty



PRODUCT NAME CODE (PNC)

AS-M1203-H(M10)-450/455/460/HV
(white backsheet, silver frame)
AS-M1203Z-H(M10)-450/455/460/HV
(white backsheet, black frame)



ADVANTAGES

More converting surface, more energy outputs
Outstanding sleek optics
Extra long cables for greater installation flexibility



AS-M1203-H(M10) / HALF-CUT CELLS PHOTOVOLTAIC MODULE

PRODUCT SERIES & NAMECODE (PNC)	
AEG HIGH EFFICIENCY SERIES	
AS-M1203-H(M10)-450/455/460-HV, silver frame	
AS-M1203Z-H(M10)-450/455/460-HV, black frame	

ELECTRICAL CHARACTERISTICS AT STC ^{1,2}				
Nominal Power (Pmax)	[Wp]	450	455	460
Power Sorting ³	[W]	0-5	0-5	0-5
Maximum Power Voltage (Vmp)	[V]	34.83	35.00	35.17
Maximum Power Current (Imp)	[A]	12.92	13.00	13.08
Open Circuit Voltage (Voc)	[V]	41.45	41.65	41.85
Short Circuit Current (Isc)	[A]	13.71	13.81	13.91
Module Efficiency (ηm)	[%]	20.9	21.1	21.3
Maximum System Voltage	[V]	1500	1500	1500
Series Fuse Maximum Rating	[A]	25	25	25

ELECTRICAL CHARACTERISTICS AT NMOT ⁴				
Maximum Power (Pmax)	[W]	336.3	340.0	343.8
Maximum Power Voltage (Vmp)	[V]	32.46	32.62	32.78
Maximum Power Current (Imp)	[A]	10.36	10.42	10.49
Open Circuit Voltage (Voc)	[V]	39.17	39.36	39.55
Short Circuit Current (Isc)	[A]	11.12	11.20	11.29

MECHANICAL CHARACTERISTICS		
Solar cells	monocrystalline [pcs]	120
	Dimensions [mm]	M10 Bifacial [182 x 182]
Front glass	high-transparency	
	Thickness [mm] / [in]	3.2 / 0.13
Backsheet	White	
Encapsulant	EVA	
Frame	Anodized aluminum alloy	Silver or black
	Junction box	Split-type, IP68
UV-resistant cables	Bypass diodes	3
	Length [mm] / [in]	1200 / 47.24
Connectors	Section [mm ²]	4
	MC4	
Dimensions	H x L x W [mm]	1903 x 1134 x 35
	H x L x W [in]	74.92 x 44.65 x 1.38
Weight	[kg] / [lbs]	23.8 (23.5) / 52.46 (51.79)
Maximum load	Wind / Snow [Pa]	2400 / 5400
Fire Class		Class C

PACKAGING		
Packing configuration	[pcs/pallet]	31
Loading capacity	[pcs/40 ft container]	744

NOTES
1-Standard Test Conditions (STC): Irradiance 1000 W/m ² , 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/m ² , Wind Speed 1m/s; Ambient Temperature 20°C, Air Mass AM=1.5
5-Full text of the Warranty Terms available at: www.solarsolutions.ag/aeg/warranty . If not offered by your distributor, the standard warranty conditions apply.
6-(H/E/GB) 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, ending with 84.8%.
Dimensions in the technical picture are expressed in mm with tolerance ±2 mm (±0.079") / Version 2022.10.01.EN © Solar Solutions GmbH. Specifications in this datasheet are subject to change without notice.
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CERTIFICATIONS	
System	ISO 9001, ISO 14001, ISO 45001
Product	IEC 61215, IEC 61730

WARRANTIES		
Product warranty ⁵	[years]	25
Performance warranty (linear) ⁶	[years]	25

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]	0.045
Operating temperature	[°C]	-40~+85

