

# AEG HIGH EFFICIENCY SERIES

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

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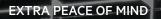
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#### CHARACTERISTICS

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

## 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)





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

#### ADVANTAGES

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

# AEG

### 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 <sup>1,2</sup>				
Nominal Power (Pmax)	[Wp]	450	455	460
Power Sorting <sup>3</sup>	[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 <sup>4</sup>				
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 CHARACTER	ISTICS			
Solar cells	monocrystalline [pcs]	120		
Solal Cells	Dimensions [mm]	M10 Bifacial [182 x 182]		
Front class	high-transparency	high-transparency		
Front glass	Thickness [mm] / [in]	3.2 / 0.13		
Backsheet	White			
Encapsulant	EVA			
Frame	Anodized aluminum alloy	Silver or black		
Junction box	Split-type, IP68	Split-type, IP68		
JUNCHON DOX	Bypass diodes	3		
	Length [mm] / [in]	1200 / 47.24		
UV-resistant cables	Section [mm <sup>2</sup> ]	4		
Connectors	MC4			
• •	HxLxW [mm]	1903 x 1134 x 35		
Dimensions	HxLxW [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			

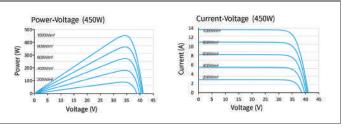
PACKAGING		
Packing configuration	[pcs/pallet]	31
Loading capacity	[pcs/40 ft container]	744

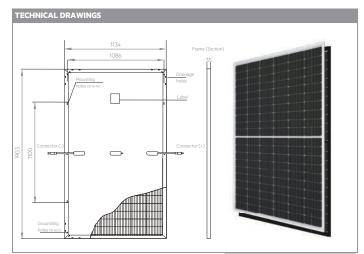
CERTIFICATIONS	
System	ISO 9001, ISO 14001, ISO 45001
Product	IEC 61215, IEC 61730

WARRANTIES			
Product warranty <sup>5</sup>	[years]	25	
Performance warranty (linear) <sup>6</sup>	[years]	25	

TEMPERATURE CHARACTERISTICS			
NMOT	[°C]	41 (±2)	
Pmax Temp. Coefficient (γ)	[%°C]	-0.35	
Voc Temp. Coefficient (β)	[%°C]	-0.27	
lsc Temp.Coefficient (α)	[%°C]	0,045	
Operating temperature	[°C]	-40~+85	

#### I/V CURVES - IRRADIANCES





NOTES
I-Standard Test Conditions (STC): Irradiance 1000 W/m <sup>2</sup> , 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 <sup>2</sup> , Wind Speed 1m/s; Ambient Temperature 20°C, Air Mass AM=15
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-(HE/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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