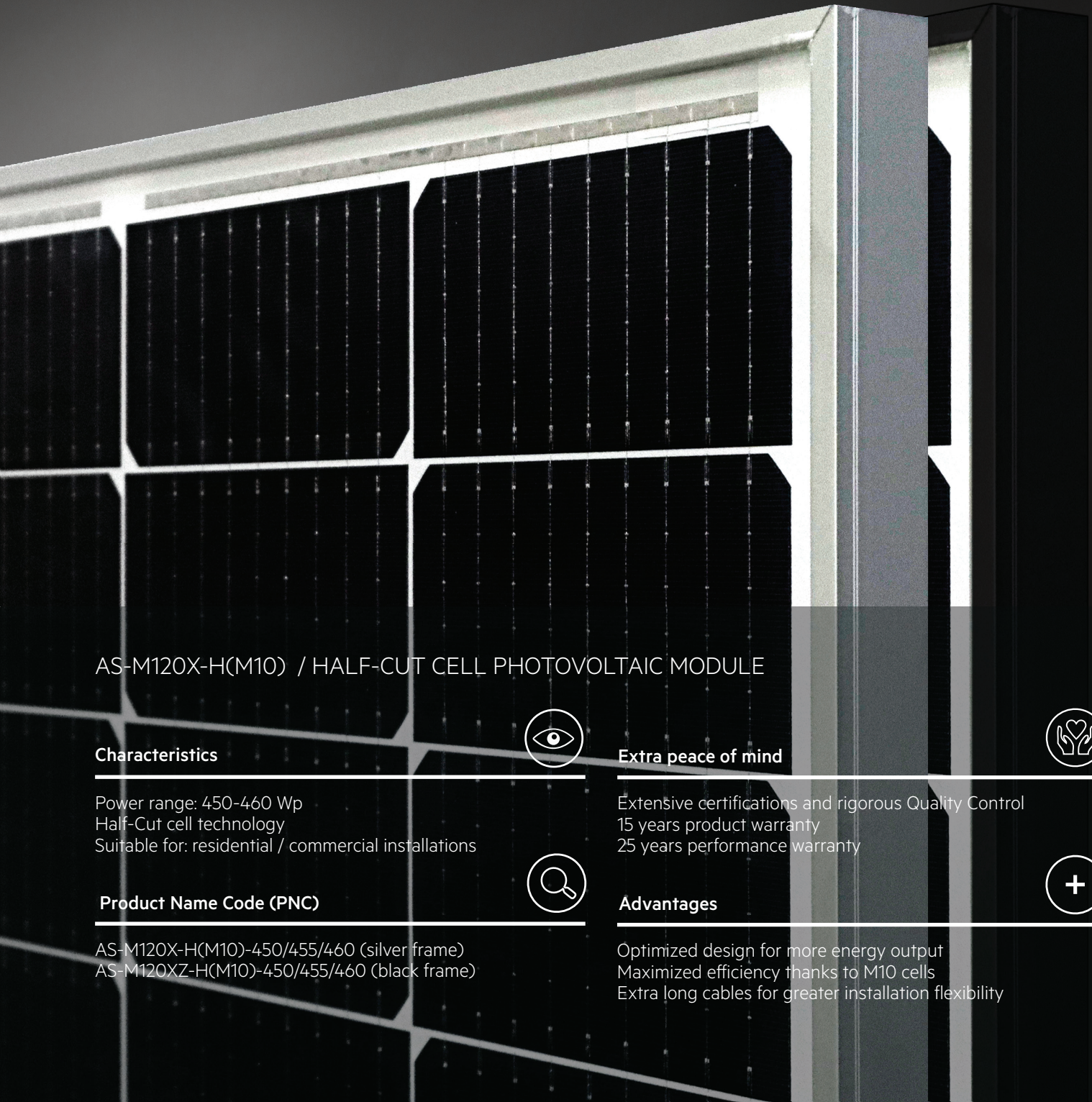




AEG HIGH EFFICIENCY SERIES



AS-M120X-H(M10) / HALF-CUT CELL 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
15 years product warranty
25 years performance warranty



Product Name Code (PNC)

AS-M120X-H(M10)-450/455/460 (silver frame)
AS-M120XZ-H(M10)-450/455/460 (black frame)



Advantages

Optimized design for more energy output
Maximized efficiency thanks to M10 cells
Extra long cables for greater installation flexibility



AS-M120X-H(M10) / HALF-CUT CELL PHOTOVOLTAIC MODULE

PRODUCT SERIES & NAMECODE (PNC)	
AEG HIGH EFFICIENCY SERIES	
AS-M120X-H(M10)-450/455/460/HV, silver frame	
AS-M120XZ-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]	33.91	34.06	34.20
Maximum Power Current (Imp)	[A]	13.27	13.36	13.45
Open Circuit Voltage (Voc)	[V]	41.18	41.33	41.48
Short Circuit Current (Isc)	[A]	13.85	13.93	14.01
Module Efficiency (ηm)	[%]	20.85	21.08	21.32
Maximum System Voltage	[V]	1500	1500	1500
Series Fuse Maximum Rating	[A]	25	25	25

ELECTRICAL CHARACTERISTICS AT NMOT ⁴				
Maximum Power (Pmax)	[W]	335	339	342
Maximum Power Voltage (Vmp)	[V]	31.73	31.91	32.07
Maximum Power Current (Imp)	[A]	10.55	10.61	10.67
Open Circuit Voltage (Voc)	[V]	38.87	39.01	39.15
Short Circuit Current (Isc)	[A]	11.19	11.25	11.32

MECHANICAL CHARACTERISTICS		
Solar cells	monocrystalline [pcs]	120
	Dimensions [mm]	M10 Half-cut [182 x 91]
Front glass	high-transparency	
	Thickness [mm] / [in]	3.2 / 0.126
Backsheet	White	
Encapsulant	EVA	
Frame	Anodized aluminum alloy	Silver or black
Junction box	IP68	
	Bypass diodes	3
UV-resistant cables	Length [mm] / [in]	300 / 11.81
	Section [mm ²]	4
Connectors	MC4-compatible	
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]	24,2
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±4%
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.aeg-industrialsolar.de . 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 2022.06.01EN © 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	IEC61215, IEC61730	

WARRANTIES		
Product warranty ⁵	[years]	15
Performance warranty (linear) ⁶	[years]	25

TEMPERATURE CHARACTERISTICS		
NMOT	[°C]	41 (±2)
Pmax Temp. Coefficient (γ)	[%/°C]	-0.35
Voc Temp. Coefficient (β)	[%/°C]	-0.28
Isc Temp. Coefficient (α)	[%/°C]	0.048
Operating temperature	[°C]	-40~+85

