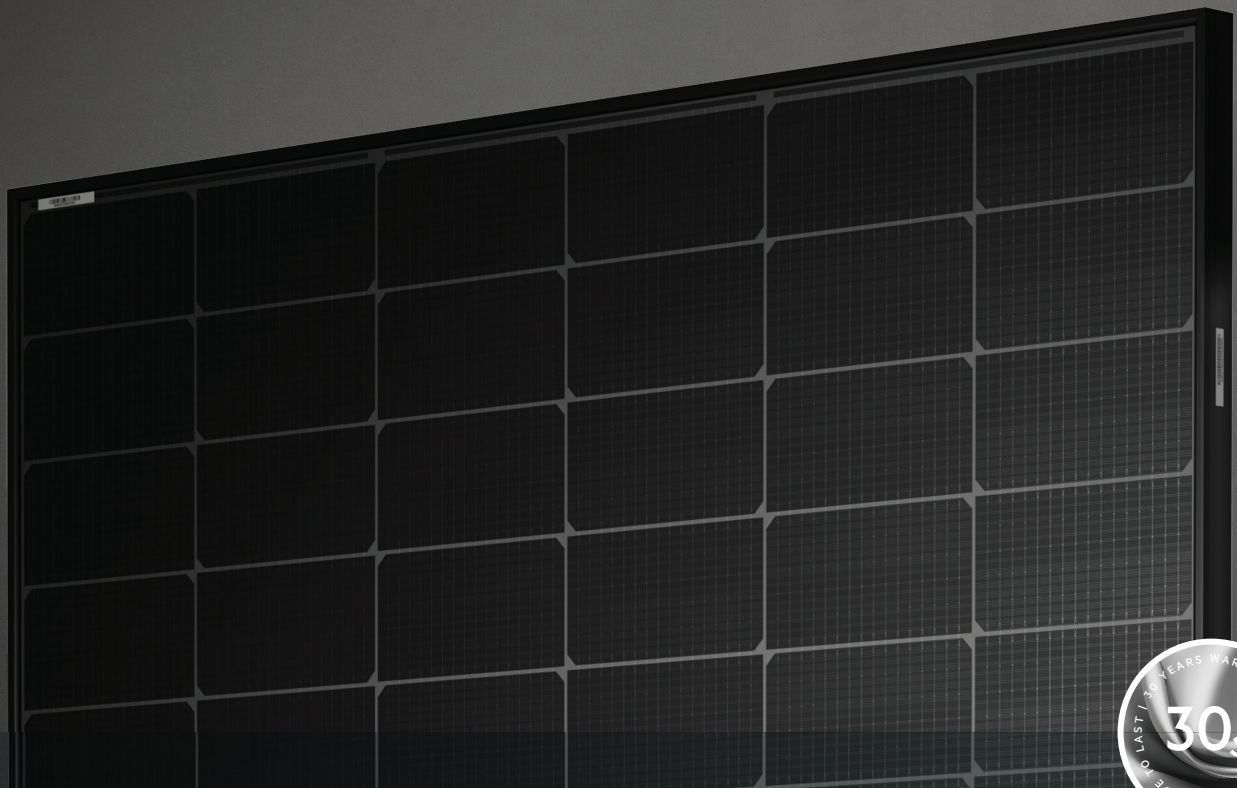




AEG HIGH EFFICIENCY SERIES



AS-M1087B-H(M10) / HV / HALF-CUT CELL TOPCON PHOTOVOLTAIC MODULE

TECHNICAL CHARACTERISTICS



Power range: 410-420 Wp
Half-Cut N-Type TOPCON cell technology
Efficiency up to 21.5%

PRODUCT NAME CODE (PNC)



AS-M1087B-H(M10)-410/415/420/HV
(black backsheet, black frame)

EXTRA PEACE OF MIND



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

ADVANTAGES



Optimized design for more energy output
Maximum power/efficiency thanks to n-type cells
Premium full black look

AS-M1087B-H(M10) / HV / HALF-CUT CELL TOPCON PHOTOVOLTAIC MODULE

PRODUCT SERIES & NAMECODE (PNC)	
AEG HIGH EFFICIENCY SERIES	
AS-M1087B-H(M10)-410/415/420/HV	
Black frame, black backsheet	

ELECTRICAL CHARACTERISTICS AT STC ^{1,2}				
Nominal Power (Pmax)	[Wp]	410	415	420
Power Sorting ³	[W]	0-5	0-5	0-5
Maximum Power Voltage (Vmp)	[V]	31.20	31.36	31.52
Maximum Power Current (Imp)	[A]	13.14	13.23	13.32
Open Circuit Voltage (Voc)	[V]	37.85	38.01	38.17
Short Circuit Current (Isc)	[A]	14.05	14.10	14.15
Module Efficiency (ηm)	[%]	21.0	21.3	21.5
Maximum System Voltage	[V]	1500	1500	1500
Series Fuse Maximum Rating	[A]	25	25	25

ELECTRICAL CHARACTERISTICS AT NMOT ⁴				
Maximum Power (Pmax)	[W]	308.0	312.0	316.0
Maximum Power Voltage (Vmp)	[V]	29.02	29.18	29.34
Maximum Power Current (Imp)	[A]	10.61	10.69	10.77
Open Circuit Voltage (Voc)	[V]	35.92	36.08	36.24
Short Circuit Current (Isc)	[A]	11.25	11.31	11.37

MECHANICAL CHARACTERISTICS		
Solar cells	monocrystalline [pcs]	108
	Dimensions [mm]	M10 Half-cut [182 x 91]
Front glass	high-transparency	
	Thickness [mm] / [in]	3.2 / 0.13
Backsheet	Black	
Encapsulant	EVA	
Frame	Anodized aluminum alloy	black
Junction box	Split type, IP68	
	Bypass diodes	3
UV-resistant cables	Length [mm] / [in]	1200 / 47.24
	Section [mm ²]	4
Connectors	MC4 original	
Dimensions	H x L x W [mm]	1722 x 1134 x 30
	H x L x W [in]	67.79 x 44.65 x 1.18
Weight	[kg] / [lbs]	20.5 / 45.19
Maximum load	Wind / Snow [Pa]	2400 / 5400
Fire Class	Class C	

PACKAGING		
Packing configuration	[pcs/pallet]	36
Loading capacity	[pcs/40 ft container]	936

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±3%
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-solar.com
6-(HE/GB) No less than 99% of the minimum "Peak Power at STC" in the first year; power output decline no more than 0.4% per year thereafter, ending with 87.40%.
Dimensions in the technical picture are expressed in mm with tolerance ±2 mm (±0.079") / Version 2024.01.V1.EN © Solar Solutions Group. Specifications in this datasheet are subject to change without notice.
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CERTIFICATIONS		
System	ISO 9001, ISO 14001, ISO 45001	
Product	IEC61215-1:2016, IEC61215-1:2016, IEC61215-2:2016, IEC61730-1:2016, IEC61730-2:2016, EN61215-1:2016, EN61215-2:2016, EN61730-1:2018, EN61730-2:2018	

WARRANTIES		
Product warranty ⁵	[years]	30
Performance warranty (linear) ⁶	[years]	30

TEMPERATURE CHARACTERISTICS		
NMOT	[°C]	45 (±2)
Pmax Temp. Coefficient (γ)	[%/°C]	-0.30
Voc Temp. Coefficient (β)	[%/°C]	-0.25
Isc Temp. Coefficient (α)	[%/°C]	0.046
Operating temperature	[°C]	-40--+85

