

# AEG

HYBRID PASSIVATED BACK CONTACT  
FULL BLACK SOLAR MODULE  
**AS-M1081B-A(M10)/HV**

## CHARACTERISTICS

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Power range: 475-490 Wp  
Hybrid Passivated Back Contact Cell technology  
Half-Cut N-Type cell technology with zero bus bar  
Efficiency up to 24.0%

## ADVANTAGES

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Anti-Shading design & Prevent localized overheating  
Maximum power/ efficiency thanks to HPBC technology  
Exchange and refund service up to 30 years  
Premium full black look



**25 YEARS PRODUCT WARRANTY AND  
30 YEARS PERFORMANCE WARRANTY  
30 YEARS EXCHANGE AND REFUND SERVICE**

## HYBRID PASSIVATED BACK CONTACT MODULE | AS-M1081B-A(M10)/HV

PRODUCT SERIES & NAMECODE (PNC)	
AEG PREMIUM SERIES	
AS-M1081B-A(M10)-475/480/485/490/ HV	
black frame, black backsheet	

ELECTRICAL CHARACTERISTICS AT STC <sup>1,2</sup>					
Nominal Power (Pmax)	[Wp]	475	480	485	490
Power Sorting <sup>3</sup>	[W]	0-5	0-5	0-5	0-5
Maximum Power Voltage (Vmp)	[V]	33.16	33.28	33.40	33.51
Maximum Power Current (Imp)	[A]	14.33	14.43	14.53	14.63
Open Circuit Voltage (Voc)	[V]	40.18	40.29	40.40	40.52
Short Circuit Current (Isc)	[A]	15.03	15.13	15.23	15.33
Module Efficiency (ηm)	[%]	23.3	23.5	23.8	24.0
Maximum System Voltage	[V]	1500	1500	1500	1500
Series Fuse Maximum Rating	[A]	25	25	25	25

ELECTRICAL CHARACTERISTICS AT NOCT <sup>4</sup>					
Maximum Power (Pmax)	[W]	362	365	369	373
Maximum Power Voltage (Vmp)	[V]	31.52	31.63	31.74	31.85
Maximum Power Current (Imp)	[A]	11.49	11.57	11.65	11.73
Open Circuit Voltage (Voc)	[V]	38.18	38.29	38.39	38.51
Short Circuit Current (Isc)	[A]	12.08	12.16	12.24	12.32

MECHANICAL CHARACTERISTICS		
Solar cells	monocrystalline [pcs]	108
	Dimensions [mm]	M10 Half-cut [182 x 91]
Front glass	high-transparency	
	Thickness [mm] / [in]	3.2 / 0.125
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 <sup>2</sup> /AWG]	4 / 12
Connectors	MC4	
Dimensions	H x L x W [mm]	1800 x 1134 x 30
	H x L x W [in]	70.87 x 44.65 x 1.18
Weight	[kg] / [lbs]	21.6 / 47.61
Hail resistance	Max. Ø 25 mm at 23 m/s	
Maximum Static Load	Rear / Front [Pa]	2400 / 5400
Fire Class	Class C	

PACKAGING		
Packing configuration	[pcs/pallet]	36
Loading capacity	[pcs/40 ft container]	864

NOTES
1-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±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-NOCT: Nominal Operating Cell Temperature, Irradiance 800 W/m <sup>2</sup> , Wind Speed 1m/s; Ambient Temperature 20°C, Air Mass AM=1.5
5-Full text of the Warranty Terms available at: <a href="http://www.aeg-solar.com">www.aeg-solar.com</a>
6-(PRE/GB) No less than 99.0% of the minimum "Peak Power at STC" in the first year; power output decline no more than 0.35% per year thereafter, ending with 88.85%.
Dimensions in the technical picture are expressed in mm with tolerance ±2 mm (+0.079 ") / Version 2025.03.V1EN © 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	IEC 61215; IEC 61730; IEC 62941	

WARRANTIES		
Product warranty <sup>5</sup>	[years]	25
Performance warranty (linear) <sup>6</sup>	[years]	30

TEMPERATURE CHARACTERISTICS		
NOCT	[°C]	45 (±2)
Pmax Temp. Coefficient (γ)	[%/°C]	-0.26
Voc Temp. Coefficient (β)	[%/°C]	-0.20
Isc Temp. Coefficient (α)	[%/°C]	+0.050
Operating temperature	[°C]	-40~+85

