



# AEG HIGH EFFICIENCY SERIES



## AS-M1082B-H(RM10) / HALF-CUT N-TYPE TOPCON PHOTOVOLTAIC MODULE

### CHARACTERISTICS



Power range: 435-445 Wp  
Half-cut N-Type cell technology,  
Suitable for: residential installations

### PRODUCT NAME CODE (PNC)



AS-M1082B-H(RM10)-435/440/445  
(black backsheets, 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  
Extra power thanks to rectangular solar cells

## AS-M1082B-H(RM10) / HALF-CUT N-TYPE TOPCON PHOTOVOLTAIC MODULE

### PRODUCT SERIES & NAMECODE (PNC)

AEG HIGH EFFICIENCY SERIES  
AS-M1082B-H(RM10)-435/440/445  
black frame, black backsheet

### ELECTRICAL CHARACTERISTICS AT STC<sup>1,2</sup>

Nominal Power (Pmax)	[Wp]	435	440	445
Power Sorting <sup>3</sup>	[W]	0-5	0-5	0-5
Maximum Power Voltage (Vmp)	[V]	32.59	32.81	33.03
Maximum Power Current (Imp)	[A]	13.35	13.42	13.48
Open Circuit Voltage (Voc)	[V]	39.20	39.40	39.60
Short Circuit Current (Isc)	[A]	13.78	13.84	13.90
Module Efficiency (ηm)	[%]	21.77	22.02	22.27
Maximum System Voltage	[V]	1000	1000	1000
Series Fuse Maximum Rating	[A]	25	25	25

### ELECTRICAL CHARACTERISTICS AT NMOT<sup>4</sup>

Maximum Power (Pmax)	[W]	327	331	335
Maximum Power Voltage (Vmp)	[V]	30.45	30.65	30.86
Maximum Power Current (Imp)	[A]	10.78	10.84	10.89
Open Circuit Voltage (Voc)	[V]	37.13	37.32	37.51
Short Circuit Current (Isc)	[A]	11.15	11.20	11.25

### MECHANICAL CHARACTERISTICS

Solar cells	monocrystalline [pcs]	108
	Dimensions [mm]	RM10 Half-cut [182 x 199]
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]	1100 / 43.30
	Section [mm <sup>2</sup> ]	4
Connectors	MC4 Original	
Dimensions	H x L x W [mm]	1762 x 1134 x 30
	H x L x W [in]	69.37 x 44.64 x 1.18
Weight	[kg] / [lbs]	20.6 / 45.40
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

<sup>1</sup>-Standard Test Conditions (STC): Irradiance 1000 W/m<sup>2</sup>, Air Mass AM = 1.5, Cell Temperature 25°C

<sup>2</sup>-Measurement tolerances (IEC 61215:2016): Pmax±3%, Voc±3%, Isc±4%

<sup>3</sup>-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

<sup>4</sup>-NMOT: Nominal operating temperature of module, Irradiance 800 W/m<sup>2</sup>, Wind Speed 1m/s, Ambient Temperature 20°C, Air Mass AM=1.5

<sup>5</sup>-Full text of the Warranty Terms available at: [www.aeg-solar.com](http://www.aeg-solar.com)

<sup>6</sup>-(H/E/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 87.4%.

Dimensions in the technical picture are expressed in mm with tolerance ±2 mm (±0.079") / Version 2023.11.02.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	IEC 61215-1:2016, IEC 61215-1:2016, IEC 61215-2:2016, IEC 61730-1:2016, EN 61215-1:2016, EN 61215-1:2016, EN IEC 61730-1:2016, EN IEC 61730-1:2016/AC:2018-06

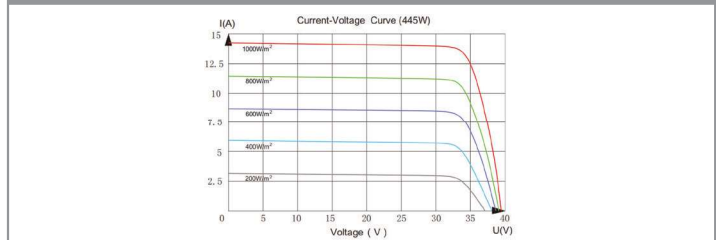
### WARRANTIES

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

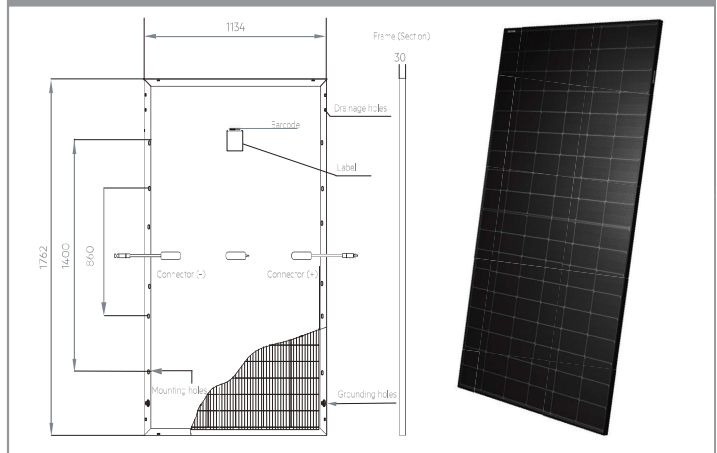
### TEMPERATURE CHARACTERISTICS

NMOT	[°C]	45 (±2)
Pmax Temp. Coefficient (γ)	[%/°C]	-0.31
Voc Temp. Coefficient (β)	[%/°C]	-0.25
Isc Temp. Coefficient (α)	[%/°C]	0.06
Operating temperature	[°C]	-40~+85

### I/V CURVES - IRRADIANCES



### TECHNICAL DRAWINGS



### CONTACT US

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