

# AEG

## AEG HIGH EFFICIENCY SERIES

### AS-M1082-H(M10) / HALF-CUT CELL PHOTOVOLTAIC MODULE

#### Characteristics

Power range: 400-410 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-M1082-H(M10)-400/405/410 (silver frame)  
AS-M1082Z-H(M10)-400/405/410 (black frame)



#### Advantages

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



## AS-M1082-H(M10) / HALF-CUT CELL PHOTOVOLTAIC MODULE

PRODUCT SERIES & NAMECODE (PNO)			
AEG HIGH EFFICIENCY SERIES			
AS-M1082-H(M10)-400/405/410, silver frame			
AS-M1082Z-H(M10)-400/405/410, black frame			

ELECTRICAL CHARACTERISTICS AT STC <sup>1,2</sup>				
Nominal Power (Pmax)	[Wp]	400	405	410
Power Sorting <sup>3</sup>	[W]	0-5	0-5	0-5
Maximum Power Voltage (Vmp)	[V]	30.35	30.52	30.69
Maximum Power Current (Imp)	[A]	13.19	13.28	13.37
Open Circuit Voltage (Voc)	[V]	37.21	37.33	37.45
Short Circuit Current (Isc)	[A]	13.59	13.68	13.77
Module Efficiency (ηm)	[%]	20.48	20.74	21.00
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]	297.02	300.72	304.45
Maximum Power Voltage (Vmp)	[V]	26.67	27.82	27.98
Maximum Power Current (Imp)	[A]	10.73	10.81	10.88
Open Circuit Voltage (Voc)	[V]	34.83	34.95	35.06
Short Circuit Current (Isc)	[A]	10.95	11.02	11.10

MECHANICAL CHARACTERISTICS		
Solar cells	monocrystalline [pcs]	108
	Dimensions [mm]	M10 Half-cut [182 x 91]
Front glass	high-transparency	
	Thickness [mm] / [in]	2.8 / 0.11
Backsheet	White	
Encapsulant	EVA	
Frame	Anodized aluminum alloy	Silver or black
Junction box	Split-type, IP67/IP68	
	Bypass diodes	3
UV-resistant cables	Length [mm] / [in]	1200 / 47.24
	Section [mm <sup>2</sup> ]	4
Connectors	MC4	
Dimensions	H x L x W [mm]	1722 x 1134 x 30
	H x L x W [in]	67.79 x 44.64 x 1.18
Weight	[kg] / [lbs]	22.3 / 49.14
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 <sup>2</sup> , 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 <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-industrialsolar.de">www.aeg-industrialsolar.de</a> . If not offered by your distributor, the standard warranty conditions apply.
6-(H/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 2022.05.01EN © Solar Solutions GmbH. Specifications in this datasheet are subject to change without notice.
AEG is a registered trademark used under license from AB Electrolux (publ).

CERTIFICATIONS		
System	ISO 9001, ISO 14001, ISO 45001	
Product	IEC 61215-1:2016, IEC 61215-1-1:2016, IEC 61215-2:2016, IEC 61730-1V-2:2016, EN 61215-1:2016, EN 61215-1-1:2016, EN IEC 61730-1V-2:2018, EN IEC 61730-1V-2:2018/AC:2018-06	

WARRANTIES		
Product warranty <sup>5</sup>	[years]	15
Performance warranty (linear) <sup>6</sup>	[years]	25

TEMPERATURE CHARACTERISTICS		
NMOT	[°C]	42 (±3)
Pmax Temp. Coefficient (γ)	[%/°C]	-0.330
Voc Temp. Coefficient (β)	[%/°C]	-0.246
Isc Temp. Coefficient (α)	[%/°C]	0.0448
Operating temperature	[°C]	-40~+85

