



# PHOTOVOLTAIC MODULE AS-M1083 (M10 CELLS)



## 400- 410 Wp 108 MONOCRYSTALLINE HALF-CUT CELLS

AEG solar modules combine the most advanced technology with high reliability in manufacture to offer you a product meant for high achievements.



## OPTIMIZED DESIGN MAXIMUM EFFICIENCY

AEG solar modules with half-cut cells (M10) and multibusbar technology are designed to maximize efficiency and plant performance. The extra-long cables allow more installation flexibility and comfort.



## EXTENSIVE WARRANTIES, EXTRA PEACE OF MIND

Thanks to their outstanding manufacturing quality, AEG High Efficiency modules (glass-backsheet) are covered by 25 years warranty on the product and 25 years warranty on performance.

## COMPREHENSIVELY CERTIFIED

AEG solar modules and production facilities are compliant with the the latest standards to guarantee safety and reliability. Production facilities are certified according to ISO 9001, ISO 14001 and OHSAS 18001. AEG solar products are certified among others by:



[www.aeg-industrialsolar.de](http://www.aeg-industrialsolar.de)

## HIGH EFFICIENCY SERIES



## PRODUCT NAMECODE (PNC)

AS-M1083-H(M10)-400/405/410/HV, silver frame  
AS-M1083Z-H(M10)-400/405/410/HV, black frame

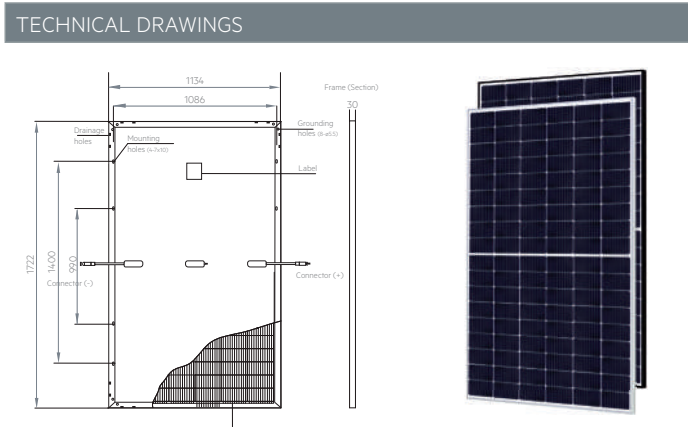
PRODUCT SERIES & NAMECODE (PNC)				
AEG HIGH EFFICIENCY SERIES				
AS-M1083-H(M10)-400/405/410/HV (silver frame)				
AS-M1083Z-H(M10)-400/405/410/HV (black frame)				

ELECTRICAL CHARACTERISTICS AT STC <sup>12</sup>				
Nominal Power (Pmax)	[Wp]	400	405	410
Power Sorting <sup>3</sup>	[Wp]	-0/+5	-0/+5	-0/+5
Maximum Power Voltage (Vmp)	[V]	31.09	31.26	31.43
Maximum Power Current (Imp)	[A]	12.86	12.96	13.05
Open Circuit Voltage (Voc)	[V]	37.00	37.20	37.40
Short Circuit Current (Isc)	[A]	13.65	13.76	13.88
Module Efficiency ( $\eta_m$ )	[%]	20.7	20.9	21.2
Maximum System Voltage	[V]	1500	1500	1500
Series Fuse Maximum Rating	[A]	20	20	20

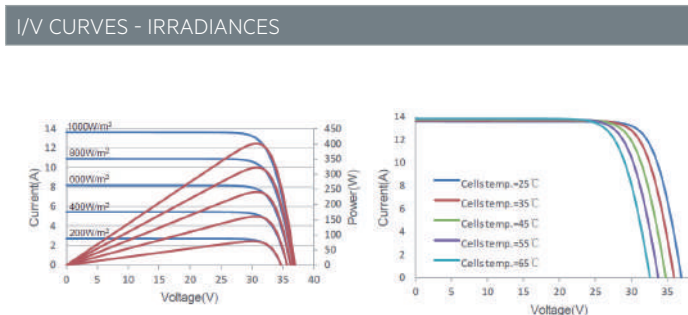
ELECTRICAL CHARACTERISTICS AT NMOT <sup>4</sup>				
Maximum Power (Pmax)	[W]	298.9	302.7	306.4
Maximum Power Voltage (Vmp)	[V]	28.98	29.13	29.29
Maximum Power Current (Imp)	[A]	10.32	10.39	10.46
Open Circuit Voltage (Voc)	[V]	34.97	35.15	35.34
Short Circuit Current (Isc)	[A]	11.07	11.17	11.26

MECHANICAL CHARACTERISTICS		
Solar cells	monocrystalline [pcs]	180
	Dimensions [mm]	M10 Half-cut [182 x 91]
Front glass	high-transparency	Transparent
	Thickness [mm] / [in]	3.2 / 0.125
Backsheet	White	
Encapsulant	EVA	Transparent
Frame	Anodized aluminum alloy	Silver or black
Junction box	Standard	IP68
	Bypass diodes	3
UV-resistant cables	Length [mm] / [in]	1200 / 47.24
	Section [mm <sup>2</sup> ]	4
Connectors	MC4	compatible
Dimensions	H x L x W [mm]	1722 x 1134 x 30
	H x L x W [in]	67.80 x 44.65 x 1.18
Weight	[kg] / [lbs]	21.6 / 47.61
Maximum load	Wind / Snow [Pa]	2400 / 5400

CERTIFICATIONS		
System	ISO 9001, ISO 14001, OHSAS 18001	
Product	IEC 61215-1/-2:2016 (EN: 2017)	
	IEC 61730-1/-2:2016 (EN: 2018)	



TEMPERATURE CHARACTERISTICS		
NMOT	[°C]	42.3
Pmax Temp. Coefficient ( $\gamma$ )	[%/°C]	-0.35
Voc Temp. Coefficient ( $\beta$ )	[%/°C]	-0.27
Isc Temp. Coefficient ( $\alpha$ )	[%/°C]	0.045
Operating temperature	[°C]	-40~+85



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

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

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±5%

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-(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. Full text of the Warranty Terms available at: [www.solarsolutionsag/aeg/warranty](http://www.solarsolutionsag/aeg/warranty)

6-Dimensions in the technical picture are expressed in mm with tolerance ±2 mm (+0.079")

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