

# 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 15 years warranty on the product and 25 years warranty on performance. For extra peace of mind, product warranty can optionally be extended to 20 years.

#### 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

HIGH EFFICIENCY SERIES



#### PRODUCT NAMECODE (PNC)

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



## AS-M1083 (M10 CELLS)

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)

CERTIFICATIONS			
System	ISO 9001, ISO 14001, OHSAS 18001		
Product	IEC61215-1:2016, IEC61215-1-1:2016, IEC61215-2:2016, IEC61730-1:2016, IEC61730-2:2016, EN61215-1:2016, EN61215-1:2016, EN61215-2:2017, EN IEC61730-1:2018, EN IEC61730-2:2018		

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 (ŋm)	[%]	20.7	20.9	21.2
Maximum System Voltage	[V]	1500	1500	1500
Series Fuse Maximum Rating	[A]	25	25	25

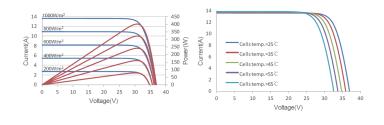
1133	Frame (Section)	
Drainage Mounting holes (s-3x0)	Grounding holes (8-465)  Label	
Connector (-)	Connector (+)	
)	Ш	

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

TEMPERATURE CHARACTERISTICS			
NMOT	[°C]	42.3	
Pmax Temp. Coefficient (γ)	[%/°C]	-0.35	
Voc Temp. Coefficient ( $oldsymbol{eta}$ )	[%/°C]	-0.27	
Isc Temp.Coefficient (α)	[%/°C]	0.045	
Operating temperature	[°C]	-40~+85	

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	Length [mm] / [in]	1200 / 47.24	
cables	Section [mm2]	4	
Connectors	MC4	compatible	
Dimensions	HxLxW [mm]	1708 x 1133 x 30	
	HxLxW [in]	67.24 x 44.60 x 1.18	
Weight	[kg] / [lbs]	21.5 / 47.3	

### I/V CURVES - IRRADIANCES



WARRANTIES		
Product warranty	[years]	15 (opt. ext. to 20)
Performance warranty (linear) <sup>5</sup>	[years]	25

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

#### CONTACT US

Solar Solutions GmbH

Brückenstrasse 94, 60594 Frankfurt am Main, Germany

+49 (0)69 400500810 | info@aeg-industrialsolar.de

www.aeg-industrialsolar.de

1-Standard Test Conditions (STC): Irradiance 1000 W/m², Air Mass AM = 1.5, Cell Temperature 25°C.

2-Measurement tolerances (IEC 61215:2016): Pmax±3%, Voc±3%, Isc±

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

-NMOT: Nominal operating temperature of module, Irradiance 800 W/m², Wind Speed 1m/s; Ambient Temperature 20°C, Air Mass AM=1.

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

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

Version 2021.04.V1-1.EN

Solar Solutions GmbH. Specifications in this datasheet are subject to change without notice.

AEG is a registered trademark used under license from AB Electrolux (pu