AEG

AEG HIGH EFFICIENCY SERIES

New Product Size

AS-M1082B-H(M10) / HALF-CUT CELLS PHOTOVOLTAIC MODULE

CHARACTERISTICS

Power range: 405-415 Wp
Half-Cut-cell technology
Suitable for: residential / commercial installations

PRODUCT NAME CODE (PNC)

AS-M1082B-H(M10)-405/410/415
(black backsheet, black frame)

EXTRA PEACE OF MIND

Extensive certifications and rigorous Quality Control
15 years product warranty
25 years performance warranty

ADVANTAGES

Half-cut cell technology for maximum efficiency
Outstanding full black optics
Extra long cables for greater installation flexibility

AS-M1082B-H(M10) / HALF-CUT CELLS PHOTOVOLTAIC MODULE

PRODUCT SERIES & NAMECODE (PNC)
AEG HIGH EFFICIENCY SERIES
AS-M1082B-H(M10)-405/410/415
black frame, black backsheet

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

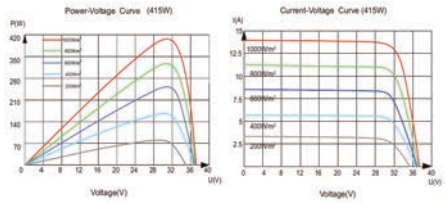
ELECTRICAL CHARACTERISTICS AT STC[1,2]				
Nominal Power (Pmax)	[Wp]	405	410	415
Power Sorting[3]	[W]	0-5	0-5	0-5
Maximum Power Voltage (Vmp)	[V]	30.91	31.09	31.27
Maximum Power Current (Imp)	[A]	13.11	13.20	13.29
Open Circuit Voltage (Voc)	[V]	37.21	37.33	37.45
Short Circuit Current (Isc)	[A]	13.98	14.06	14.13
Module Efficiency (ηm)	[%]	20.74	21.00	21.25
Maximum System Voltage	[V]	1000	1000	1000
Series Fuse Maximum Rating	[A]	25	25	25

WARRANTIES		
Product warranty[5]	[years]	15 (opt. ext. to 20)
Performance warranty (linear)[6]	[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

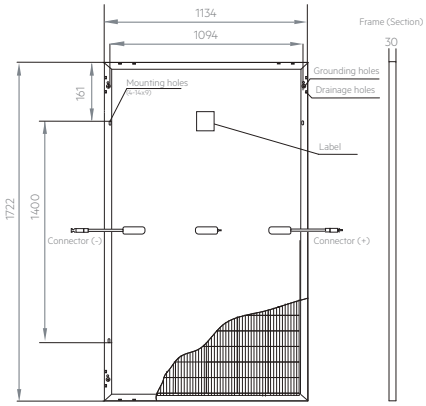
ELECTRICAL CHARACTERISTICS AT NMOT[4]				
Maximum Power (Pmax)	[W]	307	311	315
Maximum Power Voltage (Vmp)	[V]	29.55	29.72	29.90
Maximum Power Current (Imp)	[A]	10.4	10.47	10.52
Open Circuit Voltage (Voc)	[V]	35.34	35.46	35.57
Short Circuit Current (Isc)	[A]	11.21	11.28	11.33

I/V CURVES - IRRADIANCES



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]	1100 / 43.30
	Section [mm²]	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]	21.2 / 46.73
Maximum load	Wind / Snow [Pa]	2400 / 5400
Fire Class	Class C	

TECHNICAL DRAWINGS



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

NOTES

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±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/m², Wind Speed 1m/s; Ambient Temperature 20°C, Air Mass AM=1.5

5-Full text of the Warranty Terms available at: www.aeg-solar.com. If not offered by your distributor, the standard warranty conditions apply.

6-(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, ending with 84.8%.

Dimensions in the technical picture are expressed in mm with tolerance ±2 mm (±0.079 ") / Version 2023.06.01.EN © Solar Solutions Group. Specifications in this datasheet are subject to change without notice.

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