AEG

PHOTOVOLTAIC MODULE
AS°M144(X) * ¸M6 CELLS˝

445- 455 Wp
144 MONOCRYSTALLINE HALF-CUT CELLS

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

OPTIMIZED DESIGN
MAXIMUM EFFICIENCY

AEG solar modules with half-cut cells (M6) and multibusbar technology are designed to maximize e˜iciency and plant performance. The extra-long cables allow more installation flexibility and comfort.

CAREFUL SELECTION,
PREMIUM LOOK

The careful selection of components (cells, backsheet and frames) ensures a premium product look and provides extra aesthetical value.

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 ISO 45001. AEG solar products are certified among others by:

www.aeg-industrialsolar.de

HIGH EFFICIENCY SERIES

PRODUCT NAMECODE (PNC)

AS-M144(X)*-H(M6)-445/450/455, silver frame
AS-M144(X)*Z-H(M6)-445/450/455, black frame

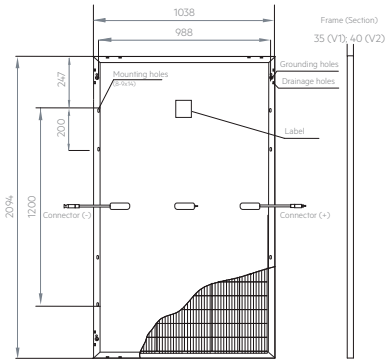
AS°M144(X) * ¸M6 CELLS˝

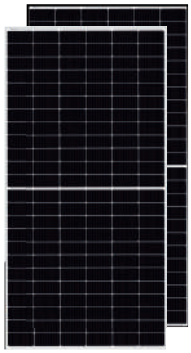
PRODUCT SERIES & NAMECODE ¸PNC˝
AEG HIGH EFFICIENCY SERIES
AS-M144(X)*-H(M6)-440/445/450, silver frame
AS-M144(X)*Z-H(M6)-440/445/450, black frame

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

ELECTRICAL CHARACTERISTICS AT STC[1,2]				
Nominal Power (Pmax)	[Wp]	445	450	455
Power Sorting[3]	[Wp]	-0/+5	-0/+5	-0/+5
Maximum Power Voltage (Vmp)	[V]	40.77	40.91	41.04
Maximum Power Current (Imp)	[A]	10.92	11.01	11.10
Open Circuit Voltage (Voc)	[V]	50.12	50.27	50.42
Short Circuit Current (Isc)	[A]	11.35	11.43	11.51
Module E˜iciency (ηm)	[%]	20.47	20.70	20.93
Maximum System Voltage	[V]	1000	1000	1000
Series Fuse Maximum Rating	[A]	20	20	20

TECHNICAL DRAWINGS



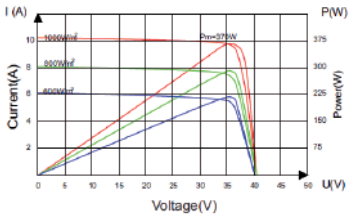


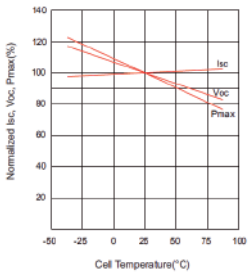
ELECTRICAL CHARACTERISTICS AT NMOT[4]				
Maximum Power (Pmax)	[W]	330.3	334.2	338.0
Maximum Power Voltage (Vmp)	[V]	37.17	37.30	37.42
Maximum Power Current (Imp)	[A]	8.89	8.96	9.03
Open Circuit Voltage (Voc)	[V]	46.92	47.06	47.20
Short Circuit Current (Isc)	[A]	9.15	9.21	9.28

TEMPERATURE CHARACTERISTICS		
NMOT	[°C]	42±3
Pmax Temp. Coe˜icient (γ)	[%/°C]	-0.365
Voc Temp. Coe˜icient (β)	[%/°C]	-0.270
Isc Temp.Coe˜icient (α)	[%/°C]	+0.038
Operating temperature	[°C]	-40~+85

MECHANICAL CHARACTERISTICS		
Solar cells	monocrystalline [pcs]	144
	Dimensions [mm]	M6 Half-cut [166 x 83]
Front glass	high-transparency	
	Thickness [mm] / [in]	3.2 / 0.126
Backsheet	White	
Encapsulant	EVA	
Frame	Anodized aluminum alloy	Silver or black
Junction box	Split-type	IP68
	Bypass diodes	3
UV-resistant cables	Length [mm] / [in]	1400 / 55.12
	Section [mm²]	4
Connectors	MC4	compatible
Dimensions	H x L x W [mm] (V1)	2094 x 1038 x 35
	H x L x W [mm] (V2, optional)	2094 x 1038 x 40
Weight	[kg]	24.3 (V1) / 24.6 (V2)
Maximum load	Wind / Snow [Pa]	2400 / 5400

I˙V CURVES ° IRRADIANCES





WARRANTIES		
Product warranty	[years]	25
Performance warranty (linear)[5]	[years]	25

PACKAGING		
Packing configuration	[pcs/pallet]	31 (V1) / 27 (V2)
Loading capacity	[pcs/40 ft container]	682 (V1) / 594 (V2)

CONTACT US
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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-(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.solarsolutions.ag/aeg/warranty

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

* Please note: (X) in Product Name Code indicates a placeholder for the factory code; on the solar module it will be indicated with a single digit from 1 to 9.

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