

AEG

PHOTOVOLTAIC MODULE AS-M1442 (M10 CELLS)



535- 550 Wp
144 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-M1442-H(M10)-445/450/455, silver frame
AS-M1442Z-H(M10)-445/450/455, black frame

(optionally available also as 1500 VDC with PNC:
AS-M1442-H(M10)/HV and AS-M1442Z-H(M10)/HV)

PRODUCT SERIES & NAMECODE (PNC)	
AEG HIGH EFFICIENCY SERIES	
AS-M1442-H(M10)-535/540/545/550 (silver frame)*	
AS-M1442Z-H(M10)-535/540/545/550 (black frame)*	

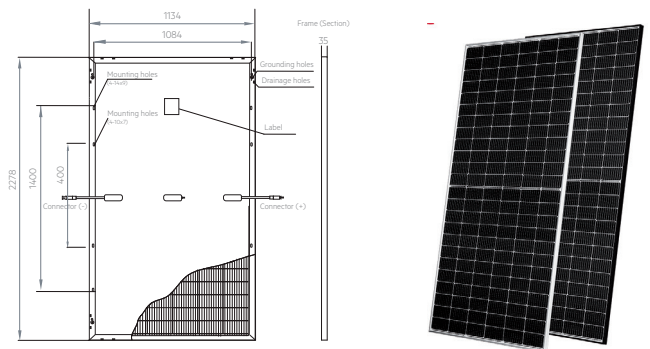
*As 1500 VDC variant: AS-M1442-H(M10)-xxx/HV (silver frame) and AS-M1442Z-H(M10)-xxx/HV (black frame), xxx=535/540/545/550

ELECTRICAL CHARACTERISTICS AT STC ^{1,2}					
Nominal Power (Pmax)	[Wp]	535	540	545	550
Power Sorting ³	[Wp]	-0/+5	-0/+5	-0/+5	-0/+5
Maximum Power Voltage (Vmp)	[V]	40.53	40.69	40.85	41.01
Maximum Power Current (Imp)	[A]	13.21	13.28	13.35	13.42
Open Circuit Voltage (Voc)	[V]	49.65	49.77	49.89	50.01
Short Circuit Current (Isc)	[A]	13.61	13.68	13.75	13.82
Module Efficiency (ηm)	[%]	20.71	20.9	21.10	21.29
Maximum System Voltage**	[V]	1000	1000	1000	1000
Series Fuse Maximum Rating	[A]	25	25	25	25

**Also optionally available for 1500 VDC Maximum System Voltage

CERTIFICATIONS	
System	ISO 9001, ISO 14001, OHSAS 18001
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

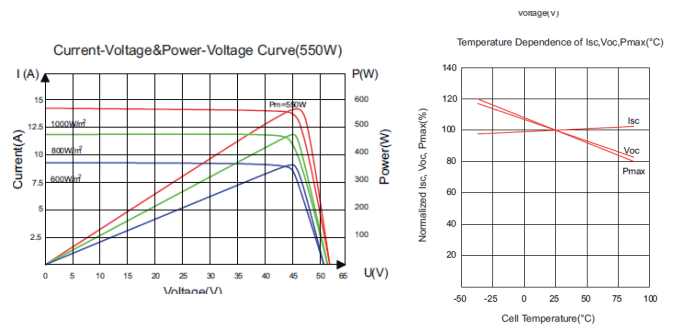
TECHNICAL DRAWINGS



MECHANICAL CHARACTERISTICS		
Solar cells	monocrystalline [pcs]	144
	Dimensions [mm]	M10 Half-cut [182 x 91]
Front glass	high-transparency	Transparent
	Thickness [mm] / [in]	3.2 / 0.126
Backsheet	White	
Encapsulant	EVA	Transparent
Frame	Anodized aluminum alloy	Silver
Junction box	Split-type	
	Bypass diodes	3
UV-resistant cables	Length [mm] / [in]	1400 / 55.12
	Section [mm ²]	4
Connectors	MC4	compatible
Dimensions	H x L x W [mm]	2278 x 1134 x 35
	H x L x W [in]	89.68 x 44.65 x 1.38
Weight	[kg] / [lbs]	29 / 63.916
Maximum load	Wind / Snow [Pa]	2400 / 5400

TEMPERATURE CHARACTERISTICS		
Pmax Temp. Coefficient (γ)	[%/°C]	-0.33
Voc Temp. Coefficient (β)	[%/°C]	-0.246
Isc Temp. Coefficient (α)	[%/°C]	0.0448
Operating temperature	[°C]	-40~+85

I/V CURVES - IRRADIANCES



PACKAGING		
Packing configuration	[pcs/pallet]	31
Loading capacity	[pcs/40 ft container]	620

WARRANTIES		
Product warranty	[years]	15 (opt. ext. to 20)
Performance warranty (linear) ⁴	[years]	25

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±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-(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.aeg-industrialsolar.de
 5-Dimensions in the technical picture are expressed in mm with tolerance ±2 mm (±0.079") Version 202110V0.0EN
 © 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).