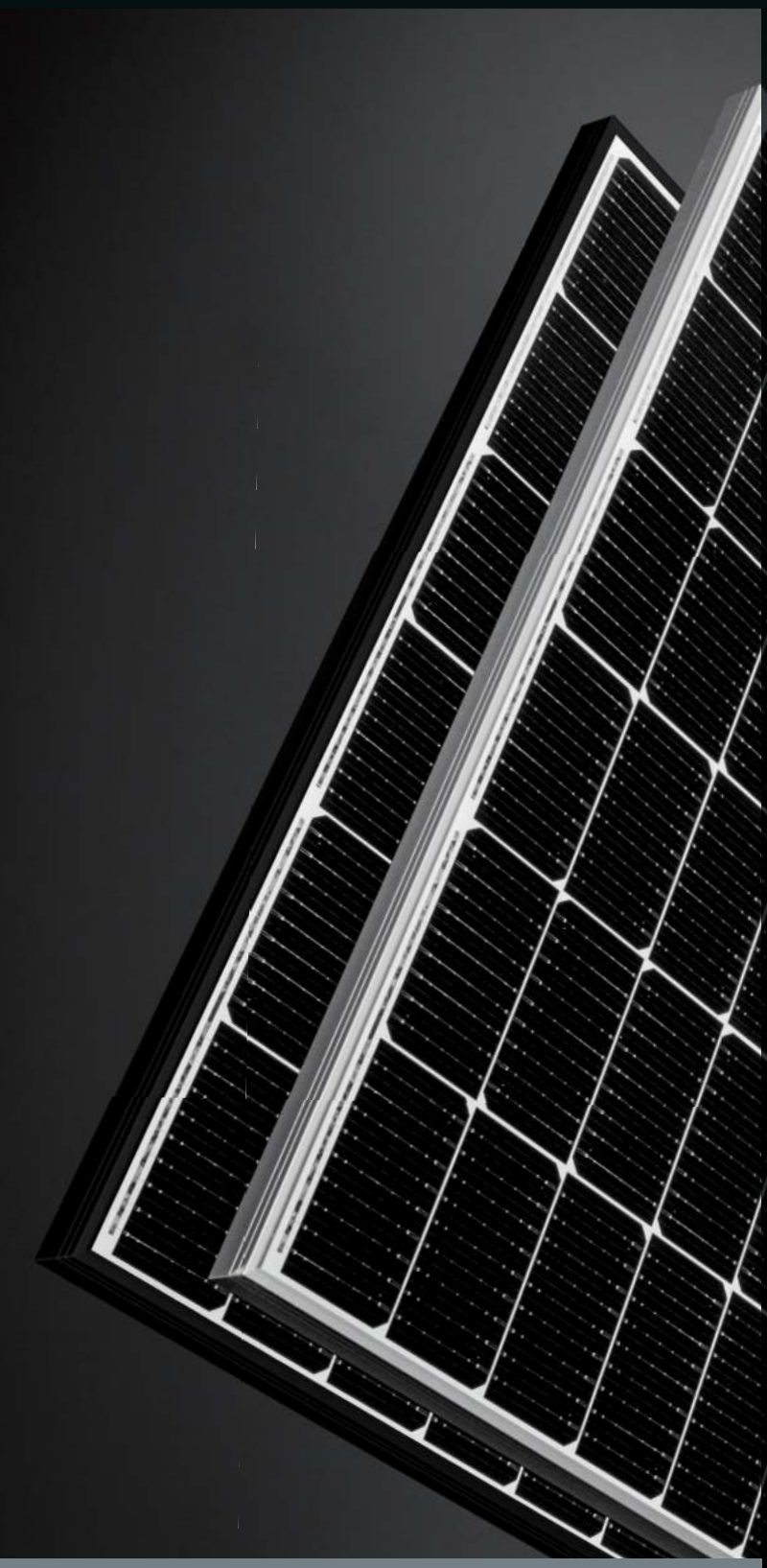
AEG

PHOTOVOLTAIC MODULE AS-M1442 (M10 CELLS)



HIGH EFFICIENCY SERIES

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 Eff iciency 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:

TÜVRheinland CERTIFIED · TÜV SÜD · TÜV NORD Type Tested

www.aeg-industrialsolar.de

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)

AEG

AS-M1442-H(M10-CELLS)

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

CERTIFICATIONS

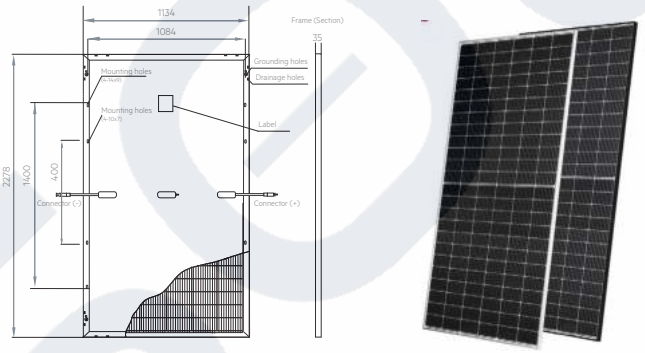
System	ISO 9001, ISO 14001, OHSAS 18001
Product	IEC 61215-1:2016, IEC 61215-1-1:2016, IEC 61215-2:2016, IEC 61730-1/-2:2016, EN 61215-1:2016, EN 61215-1-1:2016, EN IEC 61730-1/-2:2018, EN IEC 61730-1/-2:2018/AC:2018-06

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

TECHNICAL DRAWINGS



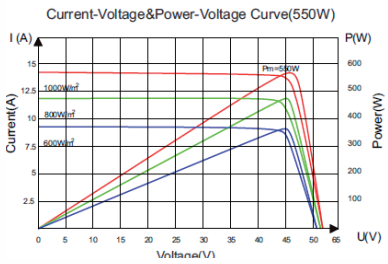
MECHANICAL CHARACTERISTICS

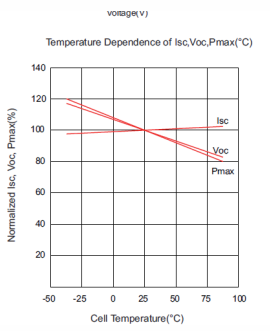
Solar cells	monocrystalline [pcs]	144
	Dimensions [mm]	M10 Half-cut [182 x 91]
Front glass	high-transparency	Transparent
	Thickness [mm] / [in]	3.2 / 0.126
Backsheet	White	
Encapsulant	EVA	Transparent
Frame	Anodized aluminum alloy	Silver or black
Junction box	Split-type	
	Bypass diodes	3
UV-resistant cables	Length [mm] / [in]	1400 / 55.12
	Section [mm²]	4
Connectors	MC4	compatible
Dimensions	H x L x W [mm]	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]	25
Performance warranty (linear)[4]	[years]	25

CONTACT US

SOLSOL

SOLSOL s.r.o., Králova 298/4, Brno, 616 00, Czech Republic

sales@solsol.cz www.solsol.cz

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.solarsolutions.ag/aeg/warranty

5-Dimensions in the technical picture are expressed in mm with tolerance ±2 mm (±0.079 ") Version 2021.10.V0.EN