

AEG

AEG PREMIUM SERIES

AS-M1443-BH(M10)/HV / BIFACIAL GLASS-GLASS PHOTOVOLTAIC MODULE

CHARACTERISTICS

Power range: 535-550 Wp
Glass-glass and bifacial cell technology
Suitable for: residential / commercial installations

PRODUCT NAME CODE (PNC)

AS-M1443-BH(M10)-535/540/545/550/HV
(transparent glass, silver frame)



EXTRA PEACE OF MIND

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



ADVANTAGES

Extra converting surface on the module back thanks to bifaciality;
Outstanding sleek optics
Extra long cables for greater installation flexibility



AS-M1443-BH(M10)/HV / BIFACIAL GLASS-GLASS PHOTOVOLTAIC MODULE

PRODUCT SERIES & NAMECODE (PNC)	
AEG PREMIUM SERIES	
AS-M1443-BH(M10)-535/540/545/550/HV	
transparent glass, silver frame	

CERTIFICATIONS	
System	ISO 9001, ISO 14001, ISO 45001
Product	IEC/EN 61215-1:2016, IEC/EN 61215-1:2016, IEC 61215-2:2016, EN 61215-2:2017, IEC 61730-1:2016 / EN IEC 61730-1:2016, IEC 61730-2:2016 / EN IEC 61730-2:2016

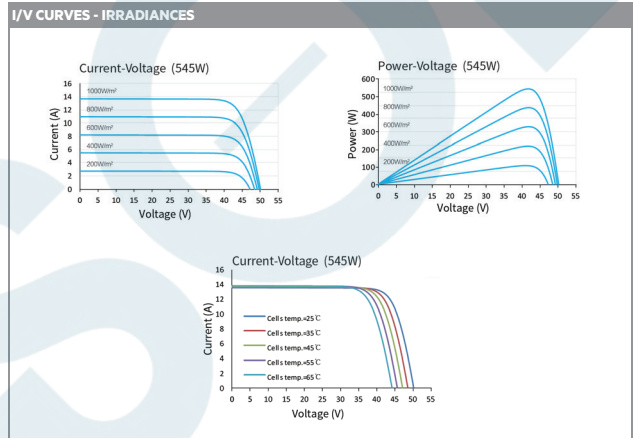
ELECTRICAL CHARACTERISTICS AT STC ^{1,2}					
Nominal Power (Pmax)	[Wp]	535	540	545	550
Power Sorting ³	[W]	0-5	0-5	0-5	0-5
Maximum Power Voltage (Vmp)	[V]	41.76	41.93	42.10	42.27
Maximum Power Current (Imp)	[A]	12.81	12.88	12.95	13.01
Open Circuit Voltage (Voc)	[V]	49.70	49.90	50.10	50.30
Short Circuit Current (Isc)	[A]	13.57	13.66	13.75	13.84
Module Efficiency (ηm)	[%]	20.7	20.9	21.1	21.3
Maximum System Voltage	[V]	1500	1500	1500	1500
Series Fuse Maximum Rating	[A]	30	30	30	30

WARRANTIES		
Product warranty ⁶	[years]	15 (opt.ext.to 20)
Performance warranty (linear) ⁷	[years]	30

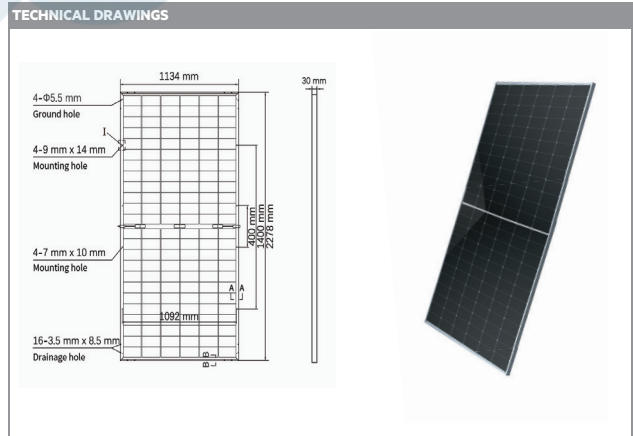
ELECTRICAL CHARACTERISTICS AT NOCT ⁴					
Maximum Power (Pmax)	[W]	399.8	403.5	407.3	411.0
Maximum Power Voltage (Vmp)	[V]	38.92	39.08	39.24	39.39
Maximum Power Current (Imp)	[A]	10.27	10.33	10.38	10.43
Open Circuit Voltage (Voc)	[V]	46.97	47.16	47.34	47.53
Short Circuit Current (Isc)	[A]	11.01	11.08	11.16	11.23

TEMPERATURE CHARACTERISTICS		
NMOT	[°C]	41 (±2)
Pmax Temp. Coefficient (γ)	[%/°C]	-0.334
Voc Temp. Coefficient (β)	[%/°C]	-0.25
Isc Temp. Coefficient (α)	[%/°C]	0.04
Operating temperature	[°C]	-40~+85

ELECTRICAL SPECIFICATIONS - INTEGRATED POWER / POWER GAIN ⁵					
Pmpp Gain		10%	15%	20%	25%
Maximum Power (Pmax)	[W]	600	627	654	681
Maximum Power Voltage (Vmp)	[V]	42.10	42.11	42.11	42.12
Maximum Power Current (Imp)	[A]	14.24	14.88	15.53	16.17
Open Circuit Voltage (Voc)	[V]	50.10	50.11	50.11	50.12
Short Circuit Current (Isc)	[A]	15.13	15.81	16.50	17.18



MECHANICAL CHARACTERISTICS		
Solar cells	monocrystalline [pcs]	144
	Dimensions [mm]	M10 Bifacial Half-cut [182 x 91]
Front glass	high-transparency	
	Thickness [mm] / [in]	2 / 0.08
Back glass	Black	2 / 0.08
Encapsulant	EVA	transparent
Frame	Anodized aluminum alloy	silver color
Junction box	Split-type, IP68	
	Bypass diodes	3
UV-resistant cables	Length [mm] / [in]	1400 / 55.11
	Section [mm²]	4
Connectors	MC4	HCB40 / MC4-EVO2A (Optional)
Dimensions	H x L x W [mm]	2278 x 1134 x 30
	H x L x W [in]	89.68 x 44.65 x 1.18
Weight	[kg] / [lbs]	32.1 / 70.76
Maximum load	Wind / Snow [Pa]	2400 / 5400
Fire Class		Class C



PACKAGING		
Packing configuration	[pcs/pallet]	36
Loading capacity	[pcs/40 ft container]	648

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±5%	
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-NOCT: Nominal operating cell temperature, Irradiance 800 W/m², Wind Speed 1m/s; Ambient Temperature 20°C, Air Mass AM=1.5	
5-Electrical characteristics with different rear power gain. Reference to 545 W	
6-Full text of the Warranty Terms available at: www.aeg-industrialsolar.de . The Extended Warranty is a separate offer. If not offered by your distributor, the standard warranty conditions apply.	
7-(PRE/GG) No less than 98% of the minimum "Peak Power at STC" in the first year; power output decline no more than 0.45% per year thereafter, ending with 85%.	
Dimensions in the technical picture are expressed in mm with tolerance ±2 mm (±0.079") / Version 2023.03.V1.EN © Solar Solutions Group. Specifications in this datasheet are subject to change without notice.	
AEG is a registered trademark used under license from AB Electrolux (publ).	

CONTACT US
 SOLSOL s.r.o.
 Králova 298/4, Brno, 616 00, Czech Republic
 sales@solsol.cz
 www.solsol.cz

