



# AEG HIGH EFFICIENCY SERIES

## AS-M3457-S(G12) / SHINGLED PHOTOVOLTAIC MODULE

### Characteristics



Power range: 540-550 Wp  
Shingled-cell technology  
Suitable for: residential / commercial installations

### Extra peace of mind



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

### Product Name Code (PNC)



AS-M3457-S(G12)-540/545/550/HV  
(white backsheet, silver frame)

### Advantages



More converting surface, more energy outputs  
Outstanding sleek optics  
Extra long cables for greater installation flexibility

## AS-M3457-S(G12) / SHINGLED PHOTOVOLTAIC MODULE

PRODUCT SERIES & NAMECODE (PNC)	
AEG HIGH EFFICIENCY SERIES	
AS-M3457-S(G12)-540/545/550/HV	
silver frame	

ELECTRICAL CHARACTERISTICS AT STC <sup>1,2</sup>				
Nominal Power (Pmax)	[Wp]	540	545	550
Power Sorting <sup>3</sup>	[W]	-0/+5	-0/+5	-0/+5
Maximum Power Voltage (Vmp)	[V]	38.9	39	39.1
Maximum Power Current (Imp)	[A]	13.87	13.97	14.07
Open Circuit Voltage (Voc)	[V]	46.9	47	47.1
Short Circuit Current (Isc)	[A]	14.76	14.86	14.97
Module Efficiency (ηm)	[%]	20.7	20.9	21
Maximum System Voltage	[V]	1500	1500	1500
Series Fuse Maximum Rating	[A]	25	25	25

ELECTRICAL CHARACTERISTICS AT NMOT <sup>4</sup>				
Maximum Power (Pmax)	[W]	407	410	414
Maximum Power Voltage (Vmp)	[V]	37.1	37.2	37.3
Maximum Power Current (Imp)	[A]	10.96	11.03	11.11
Open Circuit Voltage (Voc)	[V]	44.7	44.8	44.9
Short Circuit Current (Isc)	[A]	11.89	11.97	12.06

MECHANICAL CHARACTERISTICS		
Solar cells	monocrystalline [pcs]	345
	Dimensions [mm]	G12-based shingles
Front glass	high-transparency	
	Thickness [mm] / [in]	3.2 / 0.126
Backsheet	White	
Encapsulant	EVA	
Frame	Anodized aluminum alloy	silver
Junction box	Split-type	
	Bypass diodes	2
UV-resistant cables	Length [mm] / [in]	1400 / 55.12
	Section [mm <sup>2</sup> ]	4
Connectors	MC4	
Dimensions	H x L x W [mm]	2384 x 1096 x 35
	H x L x W [in]	93.86 x 43.15 x 1.38
Weight	[kg] / [lbs]	28.3 / 62.37
Maximum load	Wind / Snow [Pa]	2400 / 5400
Fire Class	Class C	

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

NOTES	
1-Standard Test Conditions (STC): Irradiance 1000 W/m <sup>2</sup> , Air Mass AM = 1.5, Cell Temperature 25°C	
2-Measurement tolerances (IEC 61215:2016): Pmax±3%, Voc±3%, Isc±3%	
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/m <sup>2</sup> , Wind Speed 1m/s, Ambient Temperature 20°C, Air Mass AM=1.5	
5-Full text of the Warranty Terms available at: <a href="http://www.aeg-industrialsolar.de">www.aeg-industrialsolar.de</a> . The Extended Warranty is a separate offer. 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 2022.05.V1.EN © Solar Solutions Group. Specifications in this datasheet are subject to change without notice.	
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CERTIFICATIONS		
System	ISO 9001, ISO 14001, ISO 45001	
Product	IEC/EN 61215 (-1, 1-1: 2016); IEC 61215 -2:2016; EN 61215 -2:2017 + AC2017 + AC2018; IEC 61730 (-1, -2:2016); EN 61730 -1/-2:2018 + AC 2018	

WARRANTIES		
Product warranty <sup>5</sup>	[years]	15 (opt. ext. to 20)
Performance warranty (linear) <sup>6</sup>	[years]	25

TEMPERATURE CHARACTERISTICS		
NMOT	[°C]	42.3 (±2)
Pmax Temp. Coefficient (γ)	[%/°C]	-0.34
Voc Temp. Coefficient (β)	[%/°C]	-0.27
Isc Temp. Coefficient (α)	[%/°C]	0.04
Operating temperature	[°C]	-40~+85

