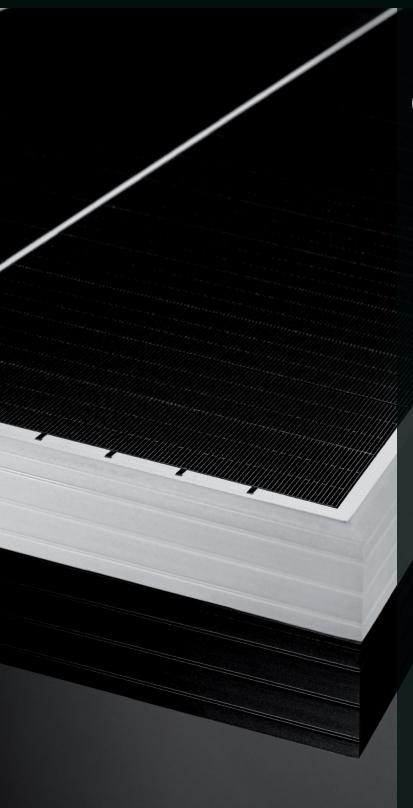


# PHOTOVOLTAIC MODULE AS-M4087-S (M6)/SHINGLED





#### 490-500 Wp 408 SHINGLED CELLS

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



### SHINGLE TECHNOLOGY FOR MAXIMUM EFFICIENCY

The shingle technology used in AEG solar modules covers larger portions of the module with cells, eliminating the need for interconnecting ribbons and reducing resistive losses. This in turns maximizes power output and module efficiency



## EXTENSIVE WARRANTIES, EXTRA PEACE OF MIND

Thanks to their outstanding manufacturing quality, AEG High Efficiency modules 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 ISO 45001. AEG solar products are certified among others by:







www.aeg-industrialsolar.de

HIGH EFFICIENCY SERIES



#### PRODUCT NAMECODE (PNC)

AS-M4087-S(M6)-490/495/500/HV (silver frame) AS-M4087Z-S(M6)-490/495/500/HV (black frame)



## AS-M4087-S (M6)/SHINGLED

PRODUCT SERIES & NAMECODE (PNC)
AEG HIGH EFFICIENCY SERIES
AS-M4087-S(M6)-490/495/500/HV, silver frame
AS-M4087Z-S(M6)-490/495/500/HV, black frame

CERTIFICATIONS				
System	ISO 9001, ISO 14001, ISO 45001			
Product	IEC/EN 61215-1:2016; IEC/EN 61215-1-1:2016; IEC 61215-2:2016 / EN 61215-2:2017 + AC:2017 + AC:2018; IEC 61730-1:2016 / EN IEC 61730-1:2018 + AC:2018; IEC 61730-2:2016 / EN IEC 61730-2:2018			

ELECTRICAL CHARACTERISTICS AT STC <sup>12</sup>				
Nominal Power (Pmax)	[Wp]	490	495	500
Power Sorting <sup>3</sup>	[Wp]	-0/+5	-0/+5	-0/+5
Maximum Power Voltage (Vmp)	[V]	38.9	39	39
Maximum Power Current (Imp)	[A]	12.60	12.69	12.82
Open Circuit Voltage (Voc)	[V]	46.7	46.8	46.8
Short Circuit Current (Isc)	[A]	13.28	13.34	13.4
Module Efficiency (ηm)	[%]	20.9	21.1	21.3
Maximum System Voltage	[V]	1500	1500	1500
Series Fuse Maximum Rating	[A]	20	20	20

TECHNICAL DRAWINGS					
Training  Draining  Police (n. v to)  Tolkes (n. v to)					

ELECTRICAL CHARACTERISTICS AT NMOT <sup>4</sup>				
Maximum Power (Pmax)	[W]	369	373	376
Maximum Power Voltage (Vmp)	[V]	37.1	37.2	37.2
Maximum Power Current (Imp)	[A]	9.95	10.02	10.13
Open Circuit Voltage (Voc)	[V]	44.5	44.6	44.6
Short Circuit Current (Isc)	[A]	10.72	10.76	10.81

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		

MECHANICAL CHARACTERISTICS				
Solar cells	monocrystalline [pcs]	408		
	Dimensions [mm]	5 shingles based on M6 cells		
Frant along	high-transparency	Transparent		
Front glass	Thickness [mm] / [in]	3.2 / 0.126		
Backsheet	White			
Encapsulant	EVA	Transparent		
Frame	Anodized aluminum alloy	Silver or black		
	Standard			
Junction box	Bypass diodes	2		
UV-resistant	Length [mm] / [in]	1400 / 55.12		
cables	Section [mm <sup>2</sup> ]	4		
Connectors	MC4	compatible		
Diamaniana	H x L x W [mm]	2056 x 1140 x 35		
Dimensions	H x L x W [in]	80.95 x 44.89 x 1.38		
Weight	[kg] / [lbs]	24.5 / 54		
Maximum load	Wind / Snow [Pa]	5400		

12	Cells temp. = 25° C	12
10	Incident Irrad. = 1000 W/m²	10
₹ .	Incident Irrad. = 800 W/m²	₹ %-
Current	Incident Irrad. = 600 W/m²	Ourment
Curr	Incident Irrad. = 400 W/m²	Incident Irrad. = 1000 W/m²
2	Incident Irrad. = 200 W/m²	Cells temp. = 40 ° C  — Cells temp. = 55 ° C  Cells temp. = 70 ° C
0	0 10 20 30 40 50	0 19 20 30 43 50 60
	Voltage [V]	Voltage [V]

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

PACKAGING				
Packing configuration	[pcs/pallet]	31		
Loading capacity	[pcs/40 ft container]	682		

#### 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±35

I/V CURVES - IRRADIANCES

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

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. Fu

6-Dimensions in the technical picture are expressed in mm with tolerance ±2 mm (±0.079 °) Version 2022.01.V1.E

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