

# PHOTOVOLTAIC MODULE AS-M4327-S (G1 CELLS)





#### 460- 470 Wp 432 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 OHSAS 18001. AEG solar products are certified among others by:







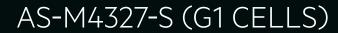
www.aeg-industrialsolar.de

HIGH EFFICIENCY SERIES



#### PRODUCT NAMECODE (PNC)

AS-M4327-S(G1)-460/465/470/HV (silver frame) AS-M4327Z-S(G1)-460/465/470/HV (black frame)





PRODUCT SERIES & NAMECODE (PNC)
AEG HIGH EFFICIENCY SERIES
AS-M4327-S(G1)-460/465/470/HV (silver frame)
AS-M4327Z-S(G1)-460/465/470/HV (black frame)

CERTIFICATIONS			
System	ISO 9001, ISO 14001, ISO45001		
Product	IEC/EN 61215-1:2016; IEC/EN 61215-1-1:2016; IEC 61215-2:2016; EN 61215-2:2017+AC:2017 +AC2018; IEC 61730-1:2016 / EN IEC 61730-2:2018+AC2018; IEC 61730-2:2018+AC2018; IEC 61730-2:2016 / EN IEC 61730-2:2018+AC2018		

ELECTRICAL CHARACTERISTICS AT STC12				
Nominal Power (Pmax)	[Wp]	460	465	470
Power Sorting <sup>3</sup>	[Wp]	-0/+5	-0/+5	-0/+5
Maximum Power Voltage (Vmp)	[V]	40.7	40.9	40.9
Maximum Power Current (Imp)	[A]	11.30	11.37	11.49
Open Circuit Voltage (Voc)	[V]	49.2	49.4	49.4
Short Circuit Current (Isc)	[A]	11.99	12.03	12.07
Module Efficiency (ηm)	[%]	20.5	20.7	20.9
Maximum System Voltage	[V]	1500	1500	1500
Series Fuse Maximum Rating	[A]	20	20	20

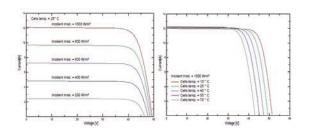
TECHNICAL DRAWINGS	
Total Constitution Total Constitution Total Constitution	Label

ELECTRICAL CHARACTERISTICS AT NMOT <sup>4</sup>				
Maximum Power (Pmax)	[W]	346	350	354
Maximum Power Voltage (Vmp)	[V]	38.8	39.0	39.0
Maximum Power Current (Imp)	[A]	8.93	8.98	9.08
Open Circuit Voltage (Voc)	[V]	46.9	47.1	47.1
Short Circuit Current (Isc)	[A]	9.66	9.69	9.72

TEMPERATURE CHARACTERISTICS			
NMOT	[°C]	42.3	
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]	432	
	Dimensions [mm]	5 shingles based on G1 cells	
Front glass	high-transparency	Transparent	
	Thickness [mm] / [in]	3.2 / 0.125	
Backsheet	White		
Encapsulant	EVA	Transparent	
Frame	Anodized aluminum alloy	Silver or black	
Junction box	Standard	IP67	
	Bypass diodes	3	
UV-resistant	Length [mm] / [in]	1300 / 51,18	
cables	Section [mm²]	4	
Connectors	MC4	compatible	
Dimensions	HxLxW [mm]	1969 x 1140 x 35	
	HxLxW [in]	77,51 x 44,88 x 1,37	
Weight	[kg] / [lbs]	24.5 / 54	
Maximum load	Wind / Snow [Pa]	2400 / 5400	

### I/V CURVES - IRRADIANCES



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±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/m², Wind Speed 1m/s; Ambient Temperature 20°C, Air Mass AM=1.5

5-(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

-Dimensions in the technical picture are expressed in mm with tolerance ±2 mm (±0.079 °)

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