

Product catalogue



2021

Forefront of providing Solar Tech solutions and transforming businesses



2020

Top design 2020



2019

Inter Solar 2019 Photovoltaics award finalist.



2018

PV magazine 2018 Top innovationaward.



2017

SNEC 2017 PV Power Expo Top 10 Highlights award.

Inspiring green energy since 2003





Born in Germany •••

AE Solar GmbH was founded by Dr. Alexander Maier and his brothers in Königsbrunn, Germany. AE Solar is one of the leading brands in the renewable energy industry, providing high-quality new energy products and services since 2003.

Driven by both innovations in technology and an effective brand strategy, AE Solar continuously extends the industry chain upstream and successfully executes the downstream projects.

AE Solar brand has become synonymous with high performing, top quality photovoltaic modules and specializes in PV technology innovation, application and system development. The company is a KEY COMPONENT SUPPLIER and PROJECT DEVELOPER. AE Solar's global sales and marketing network successfully provides end-users with accessible clean energy, whilst promoting its core brand values of STABILITY, DURABILITY and RELIABILITY.







Leading in Manufacturing ...



AE Solar focuses on the manufacturing of leading edge technological products and selects only the highest quality materials and components. This, together with a world-leading automated manufacturing lines enable us to offer a high-quality products at competitive price. Our German engineers are engaged to supervise the production process, testing and ensure each product meets the highest world standards

AE Solar has been awarded SNEC Top 10 Highlights 2017, PV Magazine Top Innovation 2018, Intersolar Award 2019 Finalist for Smart Shading Resistant Hot-Spot Free PV modules technology. We are the first company in the world manufacturing poly, mono, double glass modules with this technology. The technology has been tested by leading PV experts - Fraunhofer CSP institute.

We manufacture in-house all kinds of conventional poly, mono, double glass and bi-facial PV modules. Our glass-glass technology is the lightest in the world using specially tempered 2 mm glasses with same wind and mechanical load capabilities as conventional 3 mm glasses providing min 25% less weight load at mounting systems and rooftops.







AE SMART HOT SPOT FREE PV MODULES











Core values

Since 2003 AE Solar provides superior services to the clients and we are proud that in 2017 we have reached the number 3000 in successful installation and commissioning of solar projects.

professional services and exceptional quality products are crucial to enhance customer satisfaction and loyalty, that is very important to strengthen the relationships, retain existing customers and attract new ones.

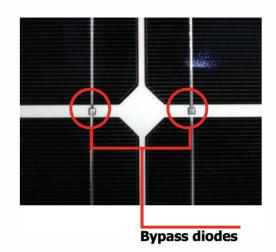




The Hot-Spot Free Modules developed by AE Solar use bypass diodes to eliminate the development of hot-spots and thus the damages and risks associated.

The temperature of Hot-Spot cells within AE Smart Hot-Spot Free Modules does not exceed 85°C. This temperature management eliminates material hazard, the safety of the module and its surroundings.

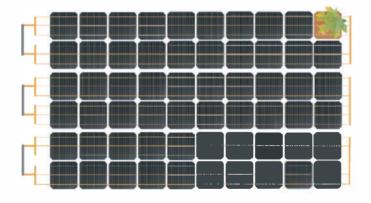
Available from 260W to 370W range, the AE Smart Hot-Spot Free Modules offer up to 30% more power output compared to standard PV Modules thanks to their improved efficiency.



AE SMART HOT SPOT FREE MODULE

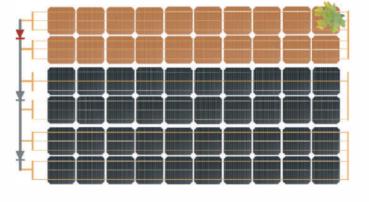


HOT-SPOT FREE technology protects each cell by an individual bypass diode.



STANDARD MODULE





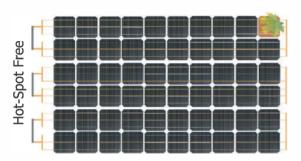
In a standard module, the impact of shading on a single cell affects a whole string, while an AE SOLAR SMART MODULE with HOT-SPOT FREE technology loses the output of only one single cell during the shading.

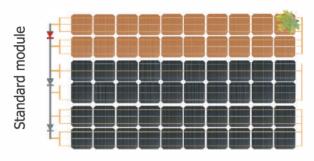
Shading In % of a single cell	0%	10%	20%	30%	40%	50%	100%
Output from AE Smart Hot-Spot Free Module	100%	98%	96%	96%	96%	96%	96%
Output from Standard Module	100%	98%	91%	83%	73%	65%	65%
Additional efficiency in Power Generation	0	0	5%	13%	23%	31%	31%





One Cell in One String





Output from AE Smart Hot-Spot Free Module

95%

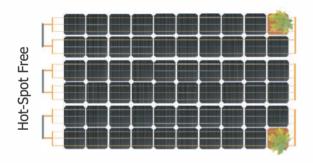
Additional efficiency in Power Generation

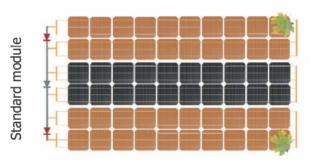
31%

Output from Standard Module

64%

One Cell in Two Different Strings





Output from AE Smart Hot-Spot Free Module

93%

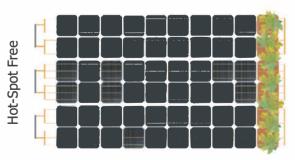
Additional efficiency in Power Generation

55%

Output from Standard Module

38%

Row of Cells Across Different Strings





Output from AE Smart Hot-Spot Free Module

Additional efficiency in Power Generation **Output from Standard Module**

83%

82%

1%

Tel.: +49 8231 92 92 52 2 Fax: +49 8231 97 82 68 9 Email: sales@ae-solar.com Web: www.ae-solar.com





PERC Technology

LARGE CELL

AE SMART HOT-SPOT FREE

MONOCRYSTALLINE PV MODULES

AE HM6-36 Series 190 W - 200 W

36 CELLS



PID RESISTANT



SALT CORROSION RESISTANT



SAND RESISTANT NH₃

AMMONIA RESISTANT



HIGHLY STABLE AND TOUGH

GERMAN QUALITY

AE Solar photovoltaic modules are produced using high quality materials, automated robotic lines, German technology and standards.



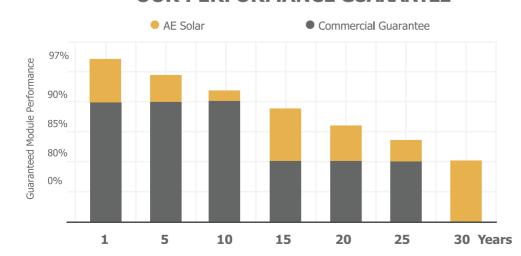
AE Solar assures high investment, security and warranty claims by providing linear performance guarantee of 30 years and 12 years of product warranty.

PLUS-SORTING

Higher yield due to plus-sorting from 0 up to +5 Wp guarantees the high system efficiency and yield stability.

CERTIFICATES

Lining with international standards, AE Solar Photovoltaic modules are tested and certified under extreme stress conditions and it can bear harsh environment influences.











AE HM6-36 Series 190W - 200W

		ALTIMO-30 Octios 130V	20000	
SPECIFICATIONS		AE190HM6-36	AE195HM6-36	AE200HM6-36
Nominal Max. Power	Pmax (Wp)	190	195	200
Maximum power voltage	Vmp(V)	19.92	20.33	20.75
Maximum power current	Imp (A)	9.54	9.59	9.64
Open-circuit voltage	Voc(V)	23.19	23.60	24.03
Short-circuit current	Isc (A)	10.50	10.59	10.67
Module efficiency	(%)	18.26	18.74	19.22
Power tolerance	Pmax (Wp)		0 / + 5	
Maximum system voltage DC	(V)		1000	
Maximum series fuse rating	(A)		15	
Operating temperature	(°C)		-40 to +85	
Temp. coefficients of Pmax	(%/°C)		-0.37	
Temp. coefficients of Voc	(%/°C)		-0.28	
Temp. coefficients of Isc	(%/°C)		0.048	
Nom. Operating cell temp.(NOCT)	(°C)		45±2	

The electrical data apply to standard test conditions (STC): Irradiance of 1000 W/m² with spectrum AM 1.5 and a cell temperature of 25°C.

MATERIAL CHARACTERISTICS

Cell type Mono-crystalline 158.75 x 158.75mm

No. of cells 36 cells

Dimensions 1530 x 680 x35 mm

Weight 12.5 KG
Junction box IP 67 rated

Output cable 1 x 4.0mm², 900mm length or customised

Connector type MC 4 / MC 4 compatible

Hail resistance Max. Ø 28 mm, at 23 m/s

Wind load 2400 Pa / 244 kg/m² Mechanical load 5400 Pa / 550 kg/m²

CERTIFICATES







PID RESISTANT SALT MIST RESISTANT SAND RESISTANT CORROSIVE GAS (NH3)







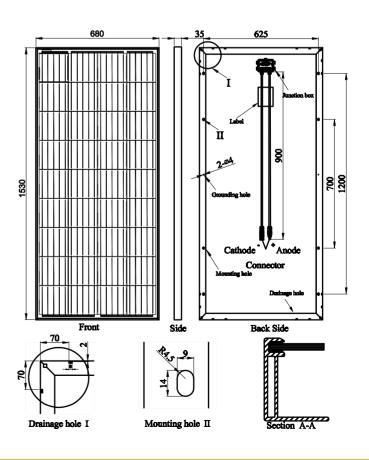


AES-DSH2019 V.002 All rights reserved. Specifications included in this $\,$ data sheet are subject to change without notice.

PACKAGING INFORMATION

Packing configuration 90 pcs / double pallet
Loading Capacity 1260 pcs / 40HQ
Size / pallet (mm) 1725 X 1135 X 2400mm
Weight 1260 KG / double pallet

DIMENSIONS



 AESOLAR
 Tel.: +49 8231 92 92 52 2

 Messerschmittring 54
 Fax: +49 8231 97 82 68 9

 36343 Konigsbrunn
 Email: sales@ae-solar.com

 Germany
 Web: www.ae-solar.com





PERC Technology

LARGE CELL

AE SMART HOT-SPOT FREE MONOCRYSTALLINE PV MODULES AE HM6-60 Series 305W-335W

60 CELLS



PID RESISTANT



SALT CORROSION RESISTANT



SAND RESISTANT



AMMONIA RESISTANT



HIGHLY STABLE AND TOUGH

GERMAN QUALITY

AE Solar photovoltaic modules are produced using high quality materials, automated robotic lines, German technology and standards.

(PEI

PERFORMANCE GUARANTEE

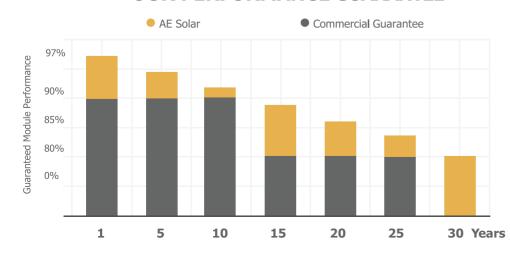
AE Solar assures high investment, security and warranty claims by providing linear performance guarantee of 30 years and 12 years of product warranty.

PLUS-SORTING

Higher yield due to plus-sorting from 0 up to +5 Wp guarantees the high system efficiency and yield stability.

CERTIFICATES

Lining with international standards, AE Solar Photovoltaic modules are tested and certified under extreme stress conditions and it can bear harsh environment influences.











AE HM6-60 Series 305W-335W

		/ \						
SPECIFICATIONS		AE305HM6-60	AE310HM6-60	AE315HM6-60	AE320HM6-60	AE325HM6-60	AE330HM6-60	AE335HM6-60
Nominal Max. Power	Pmax (Wp)	305	310	315	320	325	330	335
Maximum power voltage	Vmp(V)	32.80	33.00	33.20	33.40	33.61	33.81	34.02
Maximum power current	Imp (A)	9.30	9.40	9.49	9.59	9.68	9.76	9.85
Open-circuit voltage	Voc(V)	40.31	40.50	40.70	40.90	41.10	41.31	41.49
Short-circuit current	Isc (A)	9.83	9.92	10.04	10.15	10.20	10.37	10.49
Module efficiency	(%)	18.12	18.42	18.71	19.01	19.31	19.61	19.90
Power tolerance	Pmax (Wp)				0 / + 5			
Maximum system voltage DC	(V)				1000			
Maximum series fuse rating	(A)				15			
Operating temperature	(°C)				-40 to +85			
Temp. coefficients of Pmax	(%/°C)				-0.37			
Temp. coefficients of Voc	(%/°C)				-0.28			
Temp. coefficients of Isc	(%/°C)				0.048			
Nom. Operating cell temp.(NOCT)	(°C)				45±2			

The electrical data apply to standard test conditions (STC): Irradiance of 1000 W/m² with spectrum AM 1.5 and a cell temperature of 25°C.

Drainage hole I

MATERIAL CHARACTERISTICS

Cell type Mono-crystalline 158.75 x 158.75mm

No. of cells 60 (6 x 10)

Dimensions 1690 x 996 x 35 mm

Weight 19.0 kg

Junction box IP 67 rated

Output cable 1 x 4.0mm², 900mm length or customised

Connector type MC 4 / MC 4 compatible

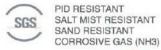
Hail resistance Max. \varnothing 28 mm, at 23 m/s

Wind load 2400 Pa / 244 kg/m 2 Mechanical load 5400 Pa / 550 kg/m 2

CERTIFICATES















PACKAGING INFORMATION

Packing configuration Loading Capacity

Size / pallet (mm)

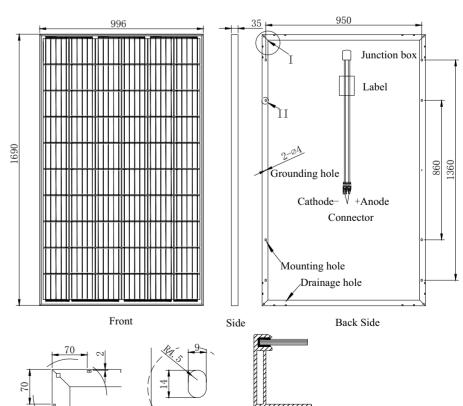
Weight

64 pcs / double pallet

832 pcs / 40HQ

1725 X 1135 X 2395mm 1315 kg / double pallet

DIMENSIONS



Mounting hole II

Section A-A

 $\mbox{AEs-DSH}\mbox{2019 V.}\mbox{002} \label{eq:DSH}\mbox{2019 Mills}\mbox{2019 Mills}\m$

Tel.: +49 8231 92 92 52 2 Fax: +49 8231 97 82 68 9 Email: sales@ae-solar.com Web: www.ae-solar.com





PERC Technology

LARGE CELL

AE SMART HOT-SPOT FREE

MONOCRYSTALLINE PV MODULES

AE HM6-72 Series 370W-400W

72 CELLS







RESISTANT

AMMONIA RESISTANT





AE Solar photovoltaic modules are produced using high quality materials, automated robotic lines, German technology and standards.



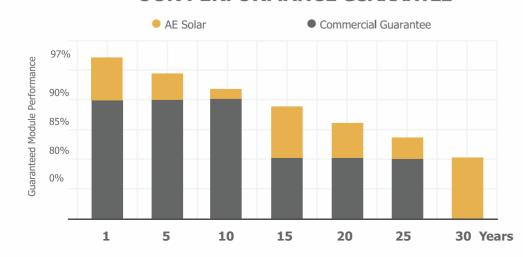
AE Solar assures high investment, security and warranty claims by providing linear performance guarantee of 30 years and 12 years of product warranty.

PLUS-SORTING

Higher yield due to plus-sorting from 0 up to +5 Wp guarantees the high system efficiency and yield stability.

CERTIFICATES

Lining with international standards, AE Solar Photovoltaic modules are tested and certified under extreme stress conditions and it can bear harsh environment influences.











AE HM6-72 Series 370W-400W

CDECTETCATIONS	•	712 11 10 72 Series 37 0 VV 100 VV						
SPECIFICATIONS		AE370HM6-72	AE375HM6-72	AE380HM6-72	AE385HM6-72	AE390HM6-72	AE395HM6-72	AE400HM6-72
Nominal Max. Power	Pmax (Wp)	370	375	380	385	390	395	400
Maximum power voltage	Vmp(V)	39.90	40.20	40.50	40.80	41.10	41.40	41.71
Maximum power current	Imp (A)	9.28	9.33	9.39	9.44	9.49	9.54	9.59
Open-circuit voltage	Voc(V)	48.51	48.72	48.90	49.10	49.30	49.48	49.69
Short-circuit current	Isc (A)	9.61	9.68	9.75	9.92	10.12	10.50	10.59
Module efficiency	(%)	18.39	18.64	18.89	19.14	19.38	19.63	19.88
Power tolerance	Pmax (Wp)				0 / + 5			
Maximum system voltage DC	(V)				1000			
Maximum series fuse rating	(A)				15			
Operating temperature	(°C)				-40 to +85	5		
Temp. coefficients of Pmax	(%/°C)				-0.37			
Temp. coefficients of Voc	(%/°C)				-0.28			
Temp. coefficients of Isc	(%/°C)				0.048			
Nom. Operating cell temp.(NOC	Γ) (°C)				45±2			

The electrical data apply to standard test conditions (STC): Irradiance of 1000 W/m² with spectrum AM 1.5 and a cell temperature of 25°C.

MATERIAL CHARACTERISTICS

Cell type Mono-crystalline 158.75 x 158.75mm

No. of cells 72 (6 x 12)

Dimensions 2020 X 996 X 35 mm

Weight 21.5 kg

Junction box IP 67 rated

Output cable 1 x 4.0mm², 1200mm length or customised

Connector type MC 4 / MC 4 compatible

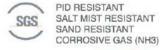
Hail resistance Max. \varnothing 28 mm, at 23 m/s

Wind load 2400 Pa / 244 kg/m² Mechanical load 5400 Pa / 550 kg/m²

CERTIFICATES













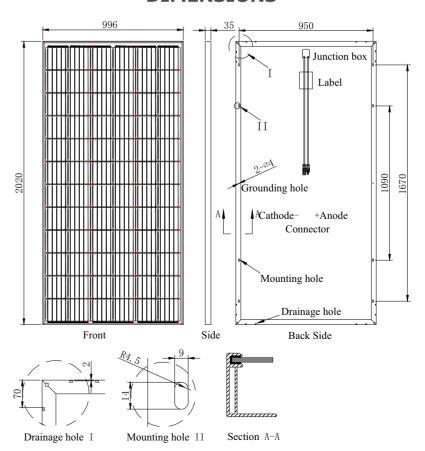


 $\label{eq:AES-DSH2019} AES-DSH2019\ V.002 \\ All rights reserved. Specifications included in this \ data sheet are subject to change without notice.$

PACKAGING INFORMATION

Packing configuration 64 pcs / double pallet
Loading Capacity 704 pcs / 40HQ
Size / pallet (mm) 2050x1120x2395mm
Weight 1495 kg / double pallet

DIMENSIONS







AE SMART HOT-SPOT FREE POLYCRYSTALLINE PV MODULES AE P6-36 Series 160W-175W



36













CELLS

SHADING RESISTANT

RESISTANT

RESISTANT

SALT CORROSION RESISTANT

RESISTANT

AMMONIA RESISTANT **HIGHLY STABLE AND TOUGH**

TEMPERATURE

Hot spot temperature lower than 85°C The IEC61215 test shows that with a zero percentage, a small and a 100 percentage of shaded area, respectively hot spots will not exceed 85°C, which is the maximum operating condition.



SAFETY

Instantly reduced temperature, thus eliminating material hazard and ensuring more safety of the module, preventing fire risks caused by hot spots.



GERMAN QUALITY

AE Solar photovoltaic modules are produced using high quality materials, automated robotic lines, German technology and standards.



PERFORMANCE GUARANTEE

AE Solar assures high investment, security and warranty claims by providing linear performance guarantee of 30 years and 12 years of product warranty.

RELIABILITY

Bypass diodes prevent cells mismatching at shaded areas. The lower temperature of hot-spot free modules will eliminate potential cause for back sheet degradation, hence enhancing reliability for longer term.

HIGH RETURNS

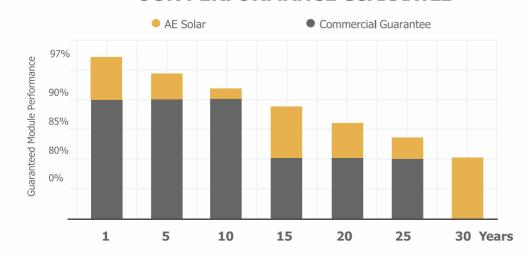
This new technology prevents instant falls in the module output, thus increasing the performance ratio up to 30% and return for all types of installations.

PLUS-SORTING

Higher yield due to plus-sorting from 0 up to +5 Wp guarantees the high system efficiency and yield stability.

CERTIFICATES

Lining with international standards, AE Solar Photovoltaic modules are tested and certified under extreme stress conditions and it can bear harsh environment influences.











AE P6-36 Series 160W-175W

SPECIFICATIONS		AE160P6-36	AE165P6-36	AE170P6-36	AE175P6-36
Nominal Max. Power	Pmax (Wp)	160	165	170	175
Maximum power voltage	Vmp(V)	18.32	18.73	19.15	19.56
Maximum power current	Imp (A)	8.73	8.81	8.88	8.95
Open-circuit voltage	Voc(V)	22.90	23.10	23.31	23.52
Short-circuit current	Isc (A)	9.31	9.35	9.42	9.48
Module efficiency	(%)	16.14	16.64	17.14	17.65
Power tolerance	Pmax (Wp)		0 / +	4.99	
Maximum system voltage DC	(V)		10	00	
Maximum series fuse rating	(A)		1	5	
Operating temperature	(°C)		-40 to	+85	
Temp. coefficients of Pmax	(%/°C)		-0.	40	
Temp. coefficients of Voc	(%/°C)		-0.	31	
Temp. coefficients of Isc	(%/°C)		0.0)53	
Nom. Operating cell temp.(NOCT)	(°C)		45	±2	

The electrical data apply to standard test conditions (STC): Irradiance of 1000 W/m² with spectrum AM 1.5 and a cell temperature of 25°C.

MATERIAL CHARACTERISTICS

Cell type Poly-crystalline 156.75mm × 156.75mm

No. of cells 36 (4 x 9)

Dimensions 1512 x 670 x 35 mm

Weight 11.5 kg

Junction box IP 67 rated

Output cable 1 x 4.0mm², 900mm length or customised

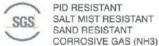
Connector type MC 4 / MC 4 compatible
Hail resistance Max. Ø 28 mm, at 23 m/s

Wind load 2400 Pa / 244 kg/m² Mechanical load 5400 Pa / 550 kg/m²

CERTIFICATES

















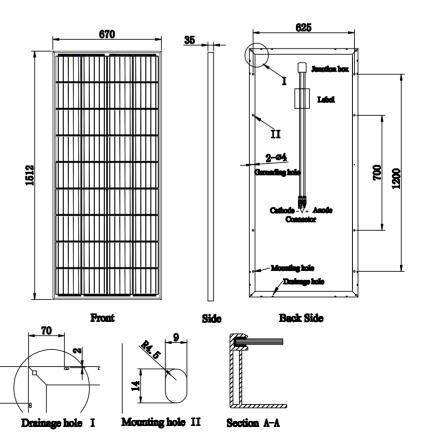
FOR INNOVATIVE SHADING RESISTANT MODULES DEVELOPMENT

AES-DSH2019 V.002 All rights reserved. Specifications included in this data sheet are subject to change without notice.

PACKAGING INFORMATION

Packing configuration 90 pcs / double pallet
Loading Capacity 1350 pcs / 40HQ
Size / pallet (mm) 1540 x 1135 x 2370
Weight 1170 kg / double pallet

DIMENSIONS







AE SMART HOT-SPOT FREE POLYCRYSTALLINE PV MODULES AE P6-60 Series 270W-290W



60















CELLS

RESISTANT

RESISTANT

RESISTANT

SALT CORROSION RESISTANT

RESISTANT

AMMONIA RESISTANT

HIGHLY STABLE AND TOUGH

TEMPERATURE

Hot spot temperature lower than 85°C The IEC61215 test shows that with a zero percentage, a small and a 100 percentage of shaded area, respectively hot spots will not exceed 85°C, which is the maximum operating condition.



Instantly reduced temperature, thus eliminating material hazard and ensuring more safety of the module, preventing fire risks caused by hot spots.

GERMAN QUALITY

AE Solar photovoltaic modules are produced using high quality materials, automated robotic lines, German technology and standards.

PERFORMANCE GUARANTEE

AE Solar assures high investment, security and warranty claims by providing linear performance guarantee of 30 years and 12 years of product warranty.

RELIABILITY

Bypass diodes prevent cells mismatching at shaded areas. The lower temperature of hot-spot free modules will eliminate potential cause for back sheet degradation, hence enhancing reliability for longer term.

HIGH RETURNS

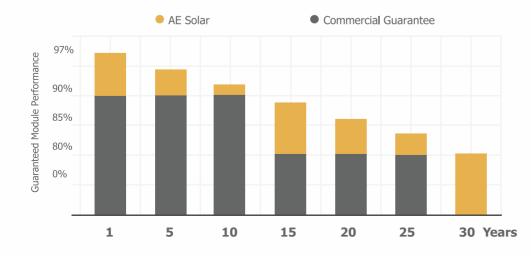
This new technology prevents instant falls in the module output, thus increasing the performance ratio up to 30% and return for all types of installations.

PLUS-SORTING

Higher yield due to plus-sorting from 0 up to +5 Wp guarantees the high system efficiency and yield stability.

CERTIFICATES

Lining with international standards, AE Solar Photovoltaic modules are tested and certified under extreme stress conditions and it can bear harsh environment influences.











AE P6-60 Series 270W-290W

SPECIFICATIONS						
SPECIFICATIONS		AE270P6-60	AE275P6-60	AE280P6-60	AE285P6-60	AE290P6-60
Nominal Max. Power	Pmax (Wp)	270	275	280	285	290
Maximum power voltage	Vmp(V)	30.82	31.24	31.65	32.07	32.48
Maximum power current	Imp (A)	8.76	8.80	8.85	8.89	8.93
Open-circuit voltage	Voc(V)	38.31	38.52	38.72	38.93	39.14
Short-circuit current	Isc (A)	9.31	9.35	9.38	9.44	9.47
Module efficiency	(%)	16.26	16.56	16.86	17.16	17.46
Power tolerance	Pmax (Wp)			0 / + 5		
Maximum system voltage DC	(V)			1000		
Maximum series fuse rating	(A)			15		
Operating temperature	(°C)			-40 to +85		
Temp. coefficients of Pmax	(%/°C)			-0.40		
Temp. coefficients of Voc	(%/°C)			-0.313		
Temp. coefficients of Isc	(%/°C)			0.05		
Nom. Operating cell temp.(NOCT)	(°C)			45±2		

The electrical data apply to standard test conditions (STC): Irradiance of 1000 W/m² with spectrum AM 1.5 and a cell temperature of 25°C.

MATERIAL CHARACTERISTICS

Cell type Poly-crystalline 156.75mm × 156.75mm

No. of cells 60 (6 x 10)

Dimensions 1674 x 992 x 35mm

Weight 18 kg

Junction box IP 67 rated

Output cable 1 x 4.0mm², 900mm length or customised

Connector type MC 4 / MC 4 compatible

Hail resistance Max. Ø 28 mm, at 23 m/s

Wind load 2400 Pa / 244 kg/m²
Mechanic 5400 Pa / 550 kg/m²

CERTIFICATES







PID RESISTANT SALT MIST RESISTANT SAND RESISTANT CORROSIVE GAS (NH3)











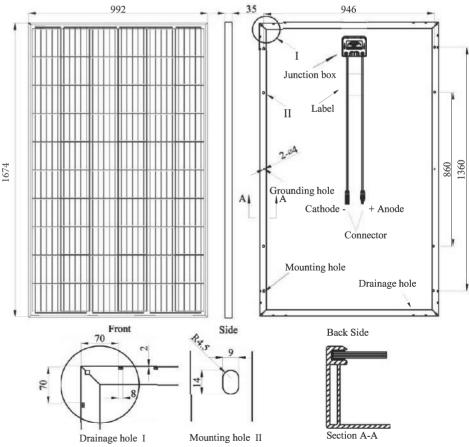
FOR INNOVATIVE SHADING RESISTANT MODULES DEVELOPMENT

AES-DSH2019 V.002 All rights reserved. Specifications included in this $\,$ data sheet are subject to change without notice.

PACKAGING INFORMATION

Packing configuration 64 pcs / double pallet
Loading Capacity 896 pcs / 40HQ
Size / pallet (mm) 1695 X 1135 X 2390
Weight 1250 kg / double pallet

DIMENSIONS







AF SMART HOT-SPOT FREE POLYCRYSTALLINE PV MODULES AE P6-72 Series 320W-345W

















CELLS

RESISTANT

RESISTANT

RESISTANT

SALT CORROSION RESISTANT

RESISTANT

AMMONIA RESISTANT

HIGHLY STABLE AND TOUGH

TEMPERATURE

Hot spot temperature lower than 85°C The IEC61215 test shows that with a zero percentage, a small and a 100 percentage of shaded area, respectively hot spots will not exceed 85°C, which is the maximum operating condition.



Instantly reduced temperature, thus eliminating material hazard and ensuring more safety of the module, preventing fire risks caused by hot spots.

GERMAN QUALITY

AE Solar photovoltaic modules are produced using high quality materials, automated robotic lines, German technology and standards.

PERFORMANCE GUARANTEE

AE Solar assures high investment, security and warranty claims by providing linear performance guarantee of 30 years and 12 years of product warranty.

RELIABILITY

Bypass diodes prevent cells mismatching at shaded areas. The lower temperature of hot-spot free modules will eliminate potential cause for back sheet degradation, hence enhancing reliability for longer term.

HIGH RETURNS

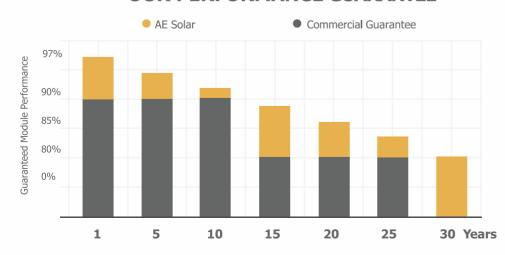
This new technology prevents instant falls in the module output, thus increasing the performance ratio up to 30% and return for all types of installations.

PLUS-SORTING

Higher yield due to plus-sorting from 0 up to +5 Wp guarantees the high system efficiency and yield stability.

CERTIFICATES

Lining with international standards, AE Solar Photovoltaic modules are tested and certified under extreme stress conditions and it can bear harsh environment influences.











AE P6-72 Series 320W-345W

SPECIFICATIONS							
SPECIFICATIONS		AE320P6-72	AE325P6-72	AE330P6-72	AE335P6-72	AE340P6-72	AE345 P6-72
Nominal Max. Power	Pmax (Wp)	320	325	330	335	340	345
Maximum power voltage	Vmp(V)	36.75	36.83	36.97	37.05	37.09	37.18
Maximum power current	Imp (A)	8.71	8.82	8.93	9.04	9.17	9.28
Open-circuit voltage	Voc(V)	45.72	45.83	45.89	45.93	45.97	47.26
Short-circuit current	Isc (A)	9.28	9.33	9.37	9.41	9.44	9.48
Module efficiency	(%)	16.13	16.38	16.63	16.98	17.14	17.39
Power tolerance	Pmax (Wp)			0 / + 5			
Maximum system voltage DC	(V)			1000			
Operating temperature	(°C)			-40 to +85	5		
Temp. coefficients of Pmax	(%/°C)			-0.40			
Temp. coefficients of Voc	(%/°C)			-0.31			
Temp. coefficients of Isc	(%/°C)			0.053			
Nom. Operating cell temp.(NOCT)	(°C)			45±2			

The electrical data apply to standard test conditions (STC): Irradiance of 1000 W/m² with spectrum AM 1.5 and a cell temperature of 25°C.

MATERIAL CHARACTERISTICS

Cell type Poly-crystalline 156.75mm × 156.75mm

No. of cells 72 (6 x 12)

Dimensions 2000 x 992 x 35mm

Weight 21 kg

Junction box IP 67 rated

Output cable 1 x 4.0mm², 1200mm length or customised

Connector type MC 4 / MC 4 compatible

Hail resistance Max. Ø 28 mm, at 23 m/s

Wind load 2400 Pa / 244 kg/m²
Mechanical load 5400 Pa / 550 kg/m²

CERTIFICATES







PID RESISTANT SALT MIST RESISTANT SAND RESISTANT CORROSIVE GAS (NH3)









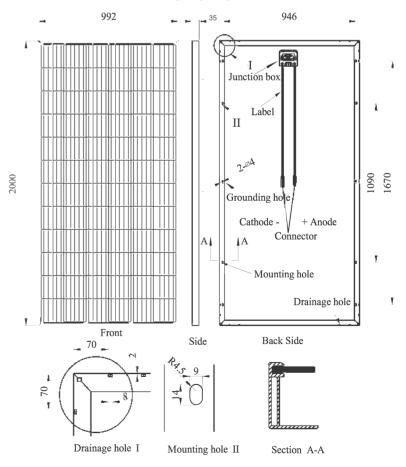


AES-DSH2019 V.002 All rights reserved. Specifications included in this data sheet are subject to change without notice.

PACKAGING INFORMATION

Packing configuration 64 pcs / double pallet
Loading Capacity 704 pcs / 40HQ
Size / pallet (mm) 2035 X 1120 X 2390
Weight 1464 kg /double pallet

DIMENSIONS



Tel.: +49 8231 92 92 52 2 Fax: +49 8231 97 82 68 9 Email: sales@ae-solar.com Web: www.ae-solar.com

Core values

Durability •••

AE Solar commits to providing only the best quality for customers. Therefore, 100% testing ratio for visual inspection, EL testing, pressure testing, mechanical load testing and age testing ensure that AE Solar photovoltaic modules operate safely and smoothly for at least 30 years with the product warranty of 12 years. Hence, guaranteeing a strong and stable return on investment for investors.





AE SHINGLED PV MODULES PERC TECHNOLOGY













PERC TECHNOLOGY

AE SHINGLED

MONOCRYSTALLINE PV MODULES AEM6 Series 380W-400W







RESISTANT

AMMONIA RESISTANT

CRACK RESISTANT

stringing process;



HIGHLY STABLE AND TOUGH

PERFORMANCE GUARANTEE

AE Solar assures high investment, security and warranty claims by providing linear performance guarantee of 30 years and 12 years of product warranty.



AESTHETICALLY PLEASING

Uniform cell layout and symmetric module Design



SYSTEM COST REDUCED

10% of Reduction in BOS and Installation cost

MHIGH EFFICIENCE

High efficiency and class leading quality

Capable of withstanding heavy loads;

Avoids micro-cracks introduced during conventional

Suitable for applications in harsh Environments

HIGH OUTPUT

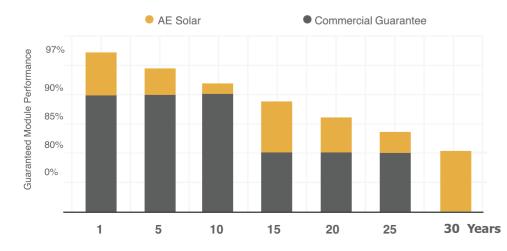
15%+more output comparing to conventional technology

COMPATIBILITY

PERC Compatible, SHJ mainstream with high efficient cell technologies

GERMAN QUALITY

AE Solar photovoltaic modules are produced using high quality materials, automated robotic lines, German technology and standards.











AE M6 Series 380W - 400W

SPECIFICATIONS						
		AE-380W-M6	AE-M6-385W	AE-M6-390W	AE-M6-395W	AE-M6-400W
Nominal Max. Power	Pmax (Wp)	380	385	390	395	400
Maximum power voltage	Vmp(V)	40.6	40.8	40.8	40.9	41.0
Maximum power current	Imp (A)	9.39	9.44	9.56	9.66	9.76
Open-circuit voltage	Voc(V)	49.1	49.3	49.3	49.4	49.6
Short-circuit current	Isc (A)	9.93	9.98	10.03	10.07	10.12
Module effciency	(%)	20.3	20.5	20.8	21.1	21.3
Power tolerance	Pmax (Wp)		0 /	+ 4.99		
Maximum system voltage DC	VDC(IEC)			1500		
Operating temperature	(°C)		-40	to +85		
Temp. coeffcients of Pmax	(%/°C)		-	0.34		
Temp. coeffcients of Voc	(%/°C)		-	0.27		
Temp. coeffcients of Isc	(%/°C)			0.04		
Nom. Operating cell temp.(NOCT)	(°C)		4	2.3±2		

The electrical data apply to standard test conditions (STC): Irradiance of 1000 W/m² with spectrum AM 1.5 and a cell temperature of 25°C.

MATERIAL CHARACTERISTICS

Cell type PERC Mono-crystalline 158.75 x 158.75mm

Dimensions 1646 X 1140 X 35 mm

Weight 20.5 kg

Junction box 15A; TUV&UL; IP67

Output cable 1000mm/4mm²

Connector type compatibility MC 4

Hail resistance Diameter of 1m. Ø 25 mm, at 23 m/s

Wind load 2400 PA / 244 kg/m² Mechanical load 5400 Pa / 550 kg/m²

CERTIFICATES











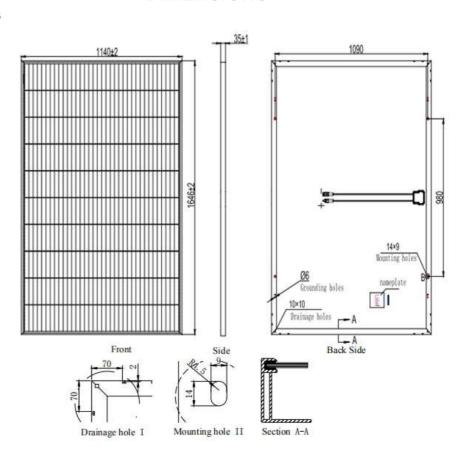


AES-DSH2019 V.002 All rights reserved. Specifications included in this $\,$ data sheet are subject to change without notice.

PACKAGING INFORMATION

Packing configuration 62pcs / double pallet
Loading Capacity 868pcs / 40HQ
Size / pallet (mm) 1685 x 1135 x 2490
Weight 1370 kg / double pallet

DIMENSIONS







PERC TECHNOLOGY **AE SHINGLED**

MONOCRYSTALLINE PV MODULES AE M6 Series 450W-475W





SALT CORROSION RESISTANT



RESISTANT

RESISTANT

E CRACK RESISTANT

stringing process;



HIGHLY STABLE AND TOUGH

PERFORMANCE GUARANTEE

AE Solar assures high investment, security and warranty claims by providing linear performance guarantee of 30 years and 12 years of product warranty.



AESTHETICALLY PLEASING

Uniform cell layout and symmetric module Design



SYSTEM COST REDUCED

10% of Reduction in BOS and Installation cost



(4) HIGH EFFICIENCE

High efficiency and class leading quality

Capable of withstanding heavy loads;

HIGH OUTPUT

15%+more output comparing to conventional technology

Avoids micro-cracks introduced during conventional

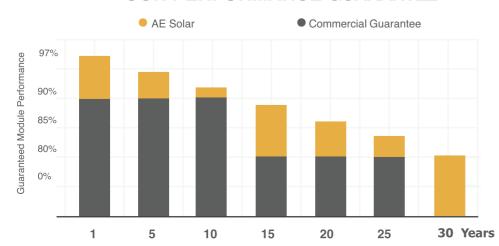
Suitable for applications in harsh Environments

COMPATIBILITY

PERC Compatible, SHJ mainstream with high efficient cell technologies

GERMAN QUALITY

AE Solar photovoltaic modules are produced using high quality materials, automated robotic lines, German technology and standards.











AE M6 Series 450W - 475W

SPECIFICATIONS		AE-M6-450W	AE-M6-455W	AE-M6-460W	AE-M6-465W	AE-M6-470W	AE-M6-475W
Nominal Max. Power	Pmax (Wp)	450	455	460	465	470	475
Maximum power voltage	Vmp(V)	40.3	40.5	40.7	40.9	40.9	41.0
Maximum power current	Imp (A)	11.17	11.23	11.30	11.37	11.49	11.59
Open-circuit voltage	Voc(V)	48.8	49.0	49.2	49.4	49.4	49.5
Short-circuit current	Isc (A)	11.90	11.95	11.99	12.03	12.07	12.12
Module effciency	(%)	20.0	20.3	20.5	20.7	20.9	21.2
Power tolerance	Pmax (Wp)			0 / +	4.99		
Maximum system voltage DC	VDC(IEC)			150	00		
Operating temperature	(°C)			-40 to	+85		
Temp. coeffcients of Pmax	(%/°C)			-0.3	34		
Temp. coeffcients of Voc	(%/°C)			-0.2	27		
Temp. coeffcients of Isc	(%/°C)			0.0)4		
Nom. Operating cell temp.(NOCT)	(°C)			42.3	3±2		

The electrical data apply to standard test conditions (STC): Irradiance of 1000 W/m² with spectrum AM 1.5 and a cell temperature of 25°C.

MATERIAL CHARACTERISTICS

Cell type PERC Mono-crystalline 158.75 x 158.75mm

Dimensions 1969 X 1140 X 35 mm

Weight 24.5 kg

Junction box 15A; TUV&UL; IP67

Output cable 1000mm/4mm²

Connector type compatibility MC 4

Hail resistance Diameter of 1m. Ø 25 mm, at 23 m/s

Wind load 2400 PA / 244 kg/m² Mechanical load 5400 Pa / 550 kg/m²

PACKAGING INFORMATION

Packing configuration 62 pcs / double pallet
Loading Capacity 682 pcs / 40 HQ
Size / pallet (mm) 2000 X 1135 X 2490
Weight 1640 kg / double pallet

DIMENSIONS

CERTIFICATES



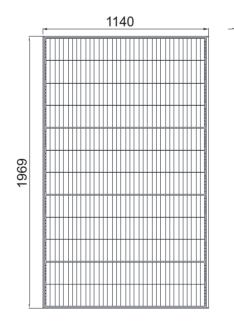


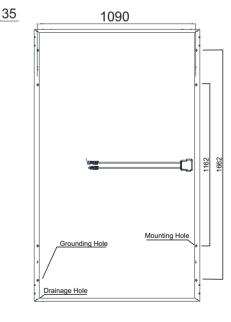


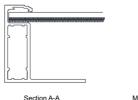




CB scheme









Mounting hole II

 $\label{eq:AES-DSH2019} AES-DSH2019 V.002 \\ All rights reserved. Specifications included in this data sheet are subject to change without notice.$





PERC TECHNOLOGY MONOCRYSTALLINE PV MODULES AE M6 Series 635 W-655 W

72



SALT CORROSION RESISTANT



SAND RESISTANT



AMMONIA RESISTANT

Capable of withstanding heavy loads;

Avoids micro-cracks introduced during conventional

Suitable for applications in harsh Environments

High efficiency and class leading quality



HIGHLY STABLE AND TOUGH

PERFORMANCE GUARANTEE

AE Solar assures high investment, security and warranty claims by providing linear performance guarantee of 30 years and 12 years of product warranty.



AESTHETICALLY PLEASING

Uniform cell layout and symmetric module Design



SYSTEM COST REDUCED

10% of Reduction in BOS and Installation cost



HIGH OUTPUT

CRACK RESISTANT

stringing process;

MHIGH EFFICIENCE

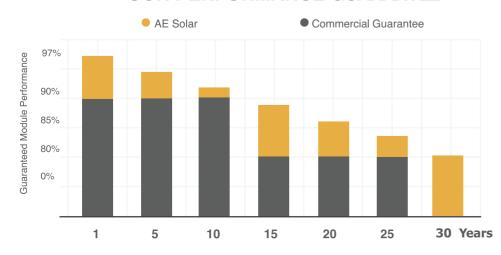
15%+more output comparing to conventional technology



PERC Compatible, SHJ mainstream with high efficient cell technologies

GERMAN QUALITY

AE Solar photovoltaic modules are produced using high quality materials, automated robotic lines, German technology and standards.











AE M6 Series 635W - 655W

SPECIFICATIONS						
or Low to Attono		AE-M6-635W	AE-M6-640W	AE-M6-645W	AE-M6-650W	AE-M6-655W
Nominal Max. Power	Pmax (Wp)	635	640	645	650	655
Maximum power voltage	Vmp(V)	37.3	37.4	37.5	37.6	37.7
Maximum power current	Imp (A)	17.02	17.11	17.20	17.29	17.37
Open-circuit voltage	Voc(V)	45.8	45.9	46.0	46.1	46.2
Short-circuit current	Isc (A)	18.12	18.03	17.94	17.85	17.76
Module effciency	(%)	20.7	20.9	21.0	21.2	21.3
Power tolerance	Pmax (Wp)			0 / + 4.99		
Maximum system voltage DC	VDC(IEC)			1500		
Maximum fuse rating	(A)			30		
Operating temperature	(°C)			-40 to +85		
Temp. coeffcients of Pmax	(%/°C)			-0.36		
Temp. coeffcients of Voc	(%/°C)			-0.28		
Temp. coeffcients of Isc	(%/°C)			0.04		
Nom. Operating cell temp.(NOCT)	(°C)			42.3±2		

The electrical data apply to standard test conditions (STC): Irradiance of 1000 W/m with spectrum AM 1.5 and a cell temperature of 25 C.

MATERIAL CHARACTERISTICS

Cell type PERC Mono-crystalline 210 x 210 mm

Dimensions 2355 X 1303 X 30 mm

Weight 38 kg

Junction box TUV&UL; IP67

Output cable 800 mm/4 mm²

Connector type compatibility MC 4

Hail resistance Diameter of 1m. Ø 25 mm, at 23 m/s

Wind load 2400 PA / 244 kg/m² Mechanical load 5400 Pa / 550 kg/m²

PACKAGING INFORMATION

Packing configuration 62 pcs / double pallet Loading Capacity 868 pcs / 40 HQ Size / pallet (mm) 2355 X 1310 X 2490

DIMENSIONS

CERTIFICATES



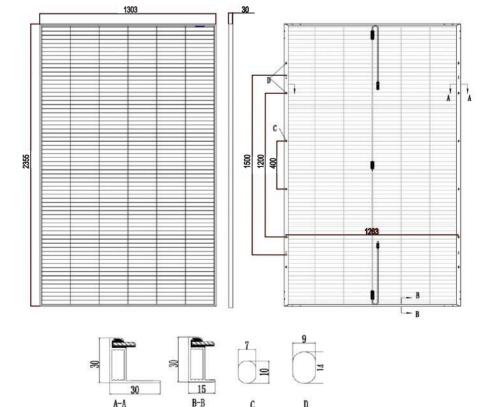








CB scheme



AES-DSH2019 V.002 All rights reserved. Specifications included in this data sheet are subject to change without notice.

TOTAL ANNUAL CAPACITY







AE POWERPLUS LARGE PV MODULES













PERC Technology

AE LARGE CELL

MONOCRYSTALLINE PV MODULES

AE HM6-60 Series 305W-335W

60 CELLS











AMMONIA RESISTANT



HIGHLY STABLE AND TOUGH

GERMAN QUALITY

AE Solar photovoltaic modules are produced using high quality materials, automated robotic lines, German technology and standards.



PLUS-SORTING

Higher yield due to plus-sorting from 0 up to +5 Wp guarantees the high system efficiency and yield stability.



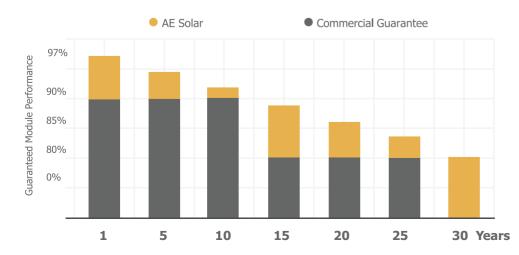
PERFORMANCE GUARANTEE

AE Solar assures high investment, security and warranty claims by providing linear performance guarantee of 30 years and 12 years of product warranty.



CERTIFICATES

Lining with international standards, AE Solar Photovoltaic modules are tested and certified under extreme stress conditions and it can bear harsh environment influences.











AE HM6-60 Series 305W-335W

SPECIFICATIONS		AE305HM6-60	AE310HM6-60	AE315HM6-60	AE320HM6-60	AE325HM6-60	AE330HM6-60	AE335HM6-60
Nominal Max. Power	Pmax (Wp)	305	310	315	320	325	330	335
Maximum power voltage	Vmp(V)	32.80	33.00	33.20	33.40	33.61	33.81	34.02
Maximum power current	Imp (A)	9.30	9.40	9.49	9.59	9.68	9.76	9.85
Open-circuit voltage	Voc(V)	40.31	40.50	40.70	40.90	41.10	41.31	41.49
Short-circuit current	Isc (A)	9.83	9.92	10.04	10.15	10.20	10.37	10.49
Module efficiency	(%)	18.39	18.69	18.99	19.30	19.60	19.90	20.20
Power tolerance	Pmax (Wp)				0 / + 5			
Maximum system voltage DC	(V)				1000			
Maximum series fuse rating	(A)				15			
Operating temperature	(°C)				-40 to +85			
Temp. coefficients of Pmax	(%/°C)				-0.37			
Temp. coefficients of Voc	(%/°C)				-0.28			
Temp. coefficients of Isc	(%/°C)				0.048			

The electrical data apply to standard test conditions (STC): Irradiance of 1000 W/m² with spectrum AM 1.5 and a cell temperature of 25°C.

MATERIAL CHARACTERISTICS

Cell type Mono-crystalline 158.75 x 158.75mm

(°C)

No. of cells 60 (6 x 10)

Nom. Operating cell temp.(NOCT)

Dimensions 1665 x 996 x 35 MM

Weight 18.5 KG

Junction box IP 67 rated

Output cable 1 x 4.0mm², 900mm length or customised

Connector type MC 4 / MC 4 compatible

Hail resistance Max. Ø 28 mm, at 23 m/s

Wind load 2400 Pa / 244 kg/m 2 Mechanical load 5400 Pa / 550 kg/m 2

PACKAGING INFORMATION

Packing configuration 64 pcs / double pallet Loading Capacity 896 pcs / 40HQ

Size / pallet (mm)

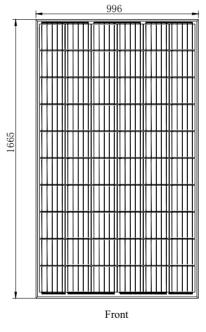
Weight

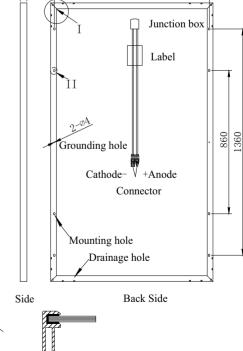
45±2

m) 1695 X 1135 X 2395mm

1283 KG / double pallet

DIMENSIONS





Section A-A

Mounting hole II

950

CERTIFICATES







PID RESISTANT SALT MIST RESISTANT SAND RESISTANT CORROSIVE GAS (NH3)









AES-DSH2019 V.002 All rights reserved. Specifications included in this data sheet are subject to change without notice.

 AESOLAR
 Tel.: +49 8231 92 92 52 2

 Messerschmittring 54
 Fax: +49 8231 97 82 68 9

 36343 Konigsbrunn
 Email: sales@ae-solar.com

 Germany
 Web: www.ae-solar.com

Drainage hole I





PERC Technology

AE LARGE CELL

MONOCRYSTALLINE PV MODULES

AE HM6-72 Series 370W-400W

72 CELLS







AMMONIA RESISTANT



HIGHLY STABLE AND TOUGH



AE Solar photovoltaic modules are produced using high quality materials, automated robotic lines, German technology and standards.



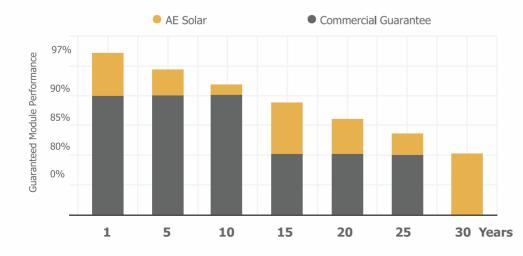
AE Solar assures high investment, security and warranty claims by providing linear performance guarantee of 30 years and 12 years of product warranty.

PLUS-SORTING

Higher yield due to plus-sorting from 0 up to +5 Wp guarantees the high system efficiency and yield stability.

CERTIFICATES

Lining with international standards, AE Solar Photovoltaic modules are tested and certified under extreme stress conditions and it can bear harsh environment influences.











SPECIFICATIONS

AE HM6-72 Series 370W-400W

SPECIFICATIONS		AE370HM6-72	AE375HM6-72	AE380HM6-72	AE385HM6-72	AE390HM6-72	AE395HM6-72	AE400HM6-72
Nominal Max. Power	Pmax (Wp)	370	375	380	385	390	395	400
Maximum power voltage	Vmp(V)	39.90	40.20	40.50	40.80	41.10	41.40	41.71
Maximum power current	Imp (A)	9.28	9.33	9.39	9.44	9.49	9.54	9.59
Open-circuit voltage	Voc(V)	48.51	48.72	48.90	49.10	49.30	49.48	49.69
Short-circuit current	Isc (A)	9.61	9.68	9.75	9.92	10.12	10.50	10.59
Module efficiency	(%)	18.77	19.08	19.28	19.53	19.79	20.04	20.29
Power tolerance	Pmax (Wp)				0 / + 5			
Maximum system voltage DC	(V)				1000			
Maximum series fuse rating	(A)				15			
Operating temperature	(°C)				-40 to +85			
Temp. coefficients of Pmax	(%/°C)				-0.37			
Temp. coefficients of Voc	(%/°C)				-0.28			
Temp. coefficients of Isc	(%/°C)				0.048			
Nom. Operating cell temp.(NOCT	(°C)				45±2			

The electrical data apply to standard test conditions (STC): Irradiance of 1000 W/m² with spectrum AM 1.5 and a cell temperature of 25°C.

MATERIAL CHARACTERISTICS

Cell type Mono-crystalline 158.75 x 158.75mm

No. of cells 72 (6 x 12)

Dimensions 1979 X 996 X 35 mm

Weight 21 KG

Junction box IP 67 rated

Output cable 1 x 4.0mm², 1200mm length or customised

Connector type MC 4 / MC 4 compatible

Hail resistance Max. Ø 28 mm, at 23 m/s

Wind load 2400 Pa / 244 kg/m² Mechanical load 5400 Pa / 550 kg/m²

CERTIFICATES







PID RESISTANT SALT MIST RESISTANT SAND RESISTANT CORROSIVE GAS (NH3)







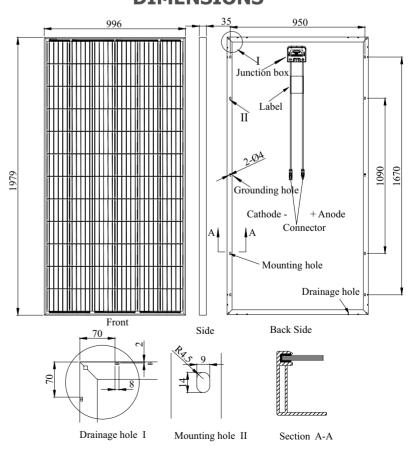


PACKAGING INFORMATION

Packing configuration 64 pcs / double pallet Loading Capacity 704 pcs / 40HQ Size / pallet (mm) 2015x1120x2395mm

Size / pallet (mm) 2015x1120x2395mm Weight 1464 KG/ double pallet

DIMENSIONS



AES-DSH2019 V.002 All rights reserved. Specifications included in this $\,$ data sheet are subject to change without notice.

Tel.: +49 8231 92 92 52 2 Fax: +49 8231 97 82 68 9 Email: sales@ae-solar.com Web: www.ae-solar.com





PERC Technology

AE LARGE CELL FULL BLACK

MONOCRYSTALLINE PV MODULES

AE HM6-60 Series 305W-335W

60 CELLS



PID S



SALT CORROSION RESISTANT



SAND RESISTANT NH₃

AMMONIA RESISTANT



HIGHLY STABLE AND TOUGH

GERMAN QUALITY

AE Solar photovoltaic modules are produced using high quality materials, automated robotic lines, German technology and standards.

PERFORMANCE GUARANTEE

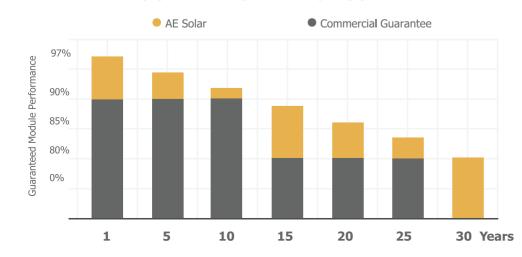
AE Solar assures high investment, security and warranty claims by providing linear performance guarantee of 30 years and 12 years of product warranty.

PLUS-SORTING

Higher yield due to plus-sorting from 0 up to +5 Wp guarantees the high system efficiency and yield stability.

CERTIFICATES

Lining with international standards, AE Solar Photovoltaic modules are tested and certified under extreme stress conditions and it can bear harsh environment influences.











SPECIFICATIONS

AE HM6-60 Series 305W-335W

SILCHICATIONS		AE305HM6-60	AE310HM6-60	AE315HM6-60	AE320HM6-60	AE325HM6-60	AE330HM6-60	AE335HM6-60
Nominal Max. Power	Pmax (Wp)	305	310	315	320	325	330	335
Maximum power voltage	Vmp(V)	32.80	33.00	33.20	33.40	33.61	33.81	34.02
Maximum power current	Imp (A)	9.30	9.40	9.49	9.59	9.68	9.76	9.85
Open-circuit voltage	Voc(V)	40.31	40.50	40.70	40.90	41.10	41.31	41.49
Short-circuit current	Isc (A)	9.83	9.92	10.04	10.15	10.20	10.37	10.49
Module efficiency	(%)	18.39	18.69	18.99	19.30	19.60	19.90	20.20
Power tolerance	Pmax (Wp)				0 / + 5			
Maximum system voltage DC	(V)				1000			
Maximum series fuse rating	(A)				15			
Operating temperature	(°C)				-40 to +85			
Temp. coefficients of Pmax	(%/°C)				-0.37			
Temp. coefficients of Voc	(%/°C)				-0.28			
Temp. coefficients of Isc	(%/°C)				0.048			
Nom. Operating cell temp.(NOCT)) (°C)				45±2			

The electrical data apply to standard test conditions (STC): Irradiance of 1000 W/m² with spectrum AM 1.5 and a cell temperature of 25°C.

MATERIAL CHARACTERISTICS

Cell type Mono-crystalline 158.75 x 158.75mm

No. of cells 60 (6 x 10)

1665 x 996 x 35 MM **Dimensions**

Weight 18.5 KG Junction box IP 67 rated

Output cable 1 x 4.0mm², 900mm length or customised

MC 4 / MC 4 compatible Connector type Max. Ø 28 mm, at 23 m/s Hail resistance

2400 Pa / 244 kg/m² Wind load Mechanical load 5400 Pa / 550 kg/m²

PACKAGING INFORMATION

Packing configuration 64 pcs / double pallet **Loading Capacity** 896 pcs / 40HQ

Size / pallet (mm) 1695 X 1135 X 2395mm Weight 1283 KG / double pallet

CERTIFICATES



IEC 61215 IEC 61730 PERIODICAL INSPECTION





PID RESISTANT SALT MIST RESISTANT SAND RESISTANT CORROSIVE GAS (NH3)

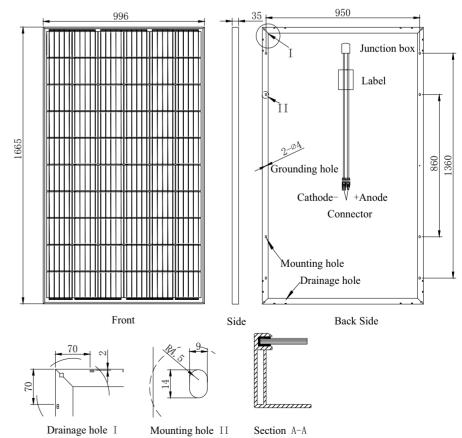








DIMENSIONS



All rights reserved. Specifications included in this data sheet are subject to change without notice.

Tel.: +49 8231 92 92 52 2 Fax: +49 8231 97 82 68 9 Email: sales@ae-solar.com Web: www.ae-solar.com





PERC Technology

AE LARGE CELL FULL BLACK

MONOCRYSTALLINE PV MODULES

AE HM6-72 Series 370W-400W

72 CELLS







SAND AMMONIA
RESISTANT RESISTANT



HIGHLY STABLE AND TOUGH

GERMAN QUALITY

AE Solar photovoltaic modules are produced using high quality materials, automated robotic lines, German technology and standards.



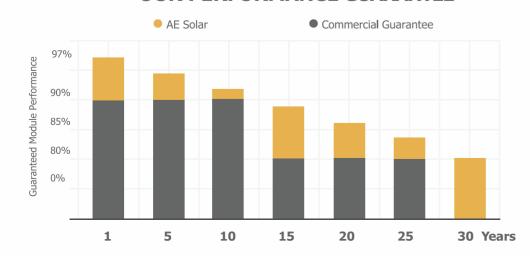
AE Solar assures high investment, security and warranty claims by providing linear performance guarantee of 30 years and 12 years of product warranty.

PLUS-SORTING

Higher yield due to plus-sorting from 0 up to +5 Wp guarantees the high system efficiency and yield stability.

CERTIFICATES

Lining with international standards, AE Solar Photovoltaic modules are tested and certified under extreme stress conditions and it can bear harsh environment influences.











SPECIFICATIONS

AE HM6-72 Series 370W-400W

SPECIFICATIONS		AE370HM6-72	AE375HM6-72	AE380HM6-72	AE385HM6-72	AE390HM6-72	AE395HM6-72	AE400HM6-72
Nominal Max. Power	Pmax (Wp)	370	375	380	385	390	395	400
Maximum power voltage	Vmp(V)	39.90	40.20	40.50	40.80	41.10	41.40	41.71
Maximum power current	Imp (A)	9.28	9.33	9.39	9.44	9.49	9.54	9.59
Open-circuit voltage	Voc(V)	48.51	48.72	48.90	49.10	49.30	49.48	49.69
Short-circuit current	Isc (A)	9.61	9.68	9.75	9.92	10.12	10.50	10.59
Module efficiency	(%)	18.77	19.08	19.28	19.53	19.79	20.04	20.29
Power tolerance	Pmax (Wp)				0 / + 5			
Maximum system voltage DC	(V)				1000			
Maximum series fuse rating	(A)				15			
Operating temperature	(°C)				-40 to +85			
Temp. coefficients of Pmax	(%/°C)				-0.37			
Temp. coefficients of Voc	(%/°C)				-0.28			
Temp. coefficients of Isc	(%/°C)				0.048			
Nom. Operating cell temp.(NOCT)) (°C)				45±2			

The electrical data apply to standard test conditions (STC): Irradiance of 1000 W/m² with spectrum AM 1.5 and a cell temperature of 25°C.

MATERIAL CHARACTERISTICS

Cell type Mono-crystalline 158.75 x 158.75mm

No. of cells 72 (6 x 12)

Dimensions 1979 X 996 X 35 mm

Weight 21 KG

Junction box IP 67 rated

Output cable 1 x 4.0mm², 1200mm length or customised

Connector type MC 4 / MC 4 compatible

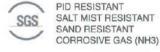
Hail resistance Max. Ø 28 mm, at 23 m/s

Wind load 2400 Pa / 244 kg/m² Mechanical load 5400 Pa / 550 kg/m²

CERTIFICATES













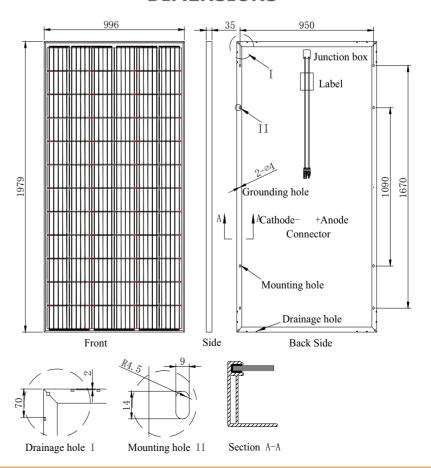


AES-DSH2019 V.002 All rights reserved. Specifications included in this data sheet are subject to change without notice.

PACKAGING INFORMATION

Packing configuration 64 pcs / double pallet
Loading Capacity 704 pcs / 40HQ
Size / pallet (mm) 2015x1120x2395
Weight 1464 kg / double pallet

DIMENSIONS



Tel.: +49 8231 92 92 52 2 Fax: +49 8231 97 82 68 9 Email: sales@ae-solar.com Web: www.ae-solar.com





PERC Technology

AE LARGE CELL BIFACIAL

MONOCRYSTALLINE PV MODULES

WITH TRANSPARENT BACKSHEET

AE HM6-60 SERIES 305W-335W

60 CELLS







SAND AMMONIA
RESISTANT RESISTANT



HIGHLY STABLE AND TOUGH



GERMAN QUALITY

AE Solar photovoltaic modules are produced using high quality materials, automated robotic lines, German technology and standards.



PERFORMANCE GUARANTEE

AE Solar assures high investment, security and warranty claims by providing linear performance guarantee of 30 years and 12 years of product warranty.



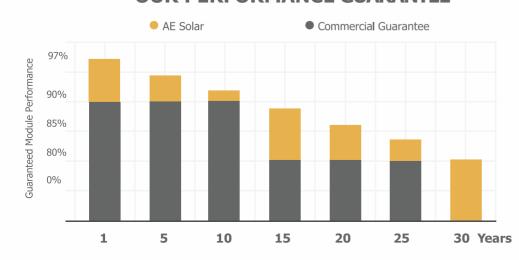
PLUS-SORTING

Higher yield due to plus-sorting from 0 up to +5 Wp guarantees the high system efficiency and yield stability.



CERTIFICATES

Lining with international standards, AE Solar Photovoltaic modules are tested and certified under extreme stress conditions and it can bear harsh environment influences.











AE HM6-60 Series 305W-335W

SPECIFICATIONS		AE305HM6-60	AE310HM6-60	AE315HM6-60	AE320HM6-60	AE325HM6-60	AE330HM6-60	AE335HM6-60
Nominal Max. Power	Pmax (Wp)	305	310	315	320	325	330	335
Maximum power voltage	Vmp(V)	32.80	33.00	33.20	33.40	33.61	33.81	34.02
Maximum power current	Imp (A)	9.30	9.40	9.49	9.59	9.68	9.76	9.85
Open-circuit voltage	Voc(V)	40.31	40.50	40.70	40.90	41.10	41.31	41.49
Short-circuit current	Isc (A)	9.83	9.92	10.04	10.15	10.20	10.37	10.49
Module efficiency	(%)	18.39	18.69	18.99	19.30	19.60	19.90	20.20
Power tolerance	Pmax (Wp))			0 / + 5			
Maximum system voltage DC	(V)				1000			
Maximum series fuse rating	(A)				15			
Operating temperature	(°C)				-40 to +85			
Temp. coefficients of Pmax	(%/°C)				-0.37			
T _{emp. coef} ficients of Voc	(%/°C)				-0.28			
Temp. coefficients of Isc	(%/°C)				0.048			
Nom. Operating cell temp.(NOCT)	(°C)				45±2			

The electrical data apply to standard test conditions (STC): Irradiance of 1000 W/m² with spectrum AM 1.5 and a cell temperature of 25°C.

Voltage(V)

MATERIAL CHARACTERISTICS

Cell type Mono-crystalline 158.75 x 158.75mm

No. of cells 60 (6 x 10)

1665 x 996 x 35 mm **Dimensions**

Weight 18.5 KG Junction box IP 67 rated

1 x 4.0mm², 900mm length or customised Output cable

Connector type MC 4 / MC 4 compatible Max. Ø 28 mm, at 23 m/s Hail resistance 2400 Pa / 244 kg/m² Wind load

5400 Pa / 550 kg/m² Mechanical load

CERTIFICATES















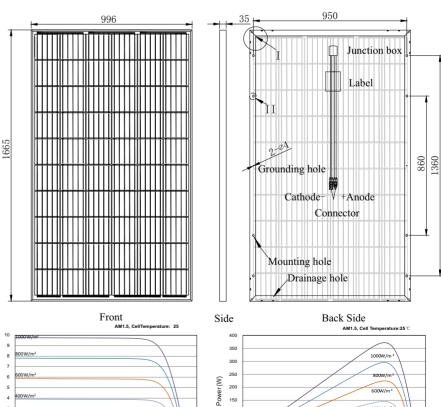
AES-DSH2019 V.002 All rights reserved. Specifications included in this data sheet are subject to change without notice.

PACKAGING INFORMATION

Packing configuration **Loading Capacity** Size / pallet (mm) Weight

64 pcs / double pallet 896 pcs / 40HQ 1695 X 1135 X 2395 1283 kg / double pallet

DIMENSIONS



Tel.: +49 8231 92 92 52 2 Fax: +49 8231 97 82 68 9 Email: sales@ae-solar.com Web: www.ae-solar.com

Voltage(V)





PERC Technology

AE LARGE CELL BIFACIAL

MONOCRYSTALLINE PV MODULES

WITH TRANSPARENT BACKSHEET

AE HM6-72 Series 380W-400W

72







SAND AMMONIA
RESISTANT RESISTANT



HIGHLY STABLE AND TOUGH

GERMAN QUALITY

AE Solar photovoltaic modules are produced using high quality materials, automated robotic lines, German technology and standards.



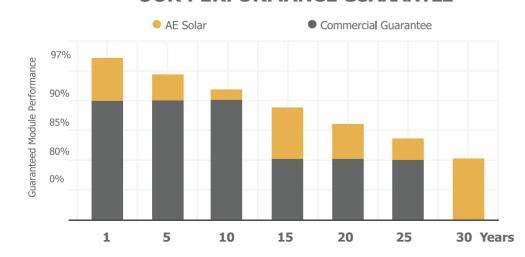
AE Solar assures high investment, security and warranty claims by providing linear performance guarantee of 30 years and 12 years of product warranty.

PLUS-SORTING

Higher yield due to plus-sorting from 0 up to +5 Wp guarantees the high system efficiency and yield stability.

CERTIFICATES

Lining with international standards, AE Solar Photovoltaic modules are tested and certified under extreme stress conditions and it can bear harsh environment influences.











AE HM6-72 Series 380W-400W

SPECIFICATIONS		AE380HM6-72	AE385HM6-72	AE390HM6-72	AE395HM6-72	AE400HM6-72
Nominal Max. Power	Pmax (Wp)	380	385	390	395	400
Maximum power voltage	Vmp(V)	40.50	40.80	41.10	41.40	41.71
Maximum power current	Imp (A)	9.39	9.44	9.49	9.54	9.59
Open-circuit voltage	Voc(V)	48.90	49.10	49.30	49.48	49. 69
Short-circuit current	Isc (A)	9.75	9.92	10.12	10.50	10.59
Module efficiency	(%)	19.28	19.53	19.79	20.04	20.29
Power tolerance	Pmax (Wp)			0 / + 5		
Maximum system voltage DC	(V)			1000		
Maximum series fuse rating	(A)			15		
Operating temperature	(°C)			-40 to +85		
Temp. coefficients of Pmax	(%/°C)			-0.37		
Temp. coefficients of Voc	(%/°C)			-0.28		
Temp. coefficients of Isc	(%/°C)			0.048		
Nom. Operating cell temp.(NOCT	Γ) (°C)			45±2		

The electrical data apply to standard test conditions (STC): Irradiance of 1000 W/m² with spectrum AM 1.5 and a cell temperature of 25°C.

MATERIAL CHARACTERISTICS

Cell type Mono-crystalline 158.75 x 158.75mm

No. of cells 72 (6 x 12)

1979 X 996 X 35 mm **Dimensions**

Weight 21 KG

Junction box IP 67 rated

1 x 4.0mm², 1200mm length or customised Output cable

MC 4 / MC 4 compatible Connector type

Hail resistance Max. Ø 28 mm, at 23 m/s

2400 Pa / 244 kg/m² Wind load 5400 Pa / 550 kg/m² Mechanical load

CERTIFICATES







PID RESISTANT SALT MIST RESISTANT SAND RESISTANT CORROSIVE GAS (NH3)





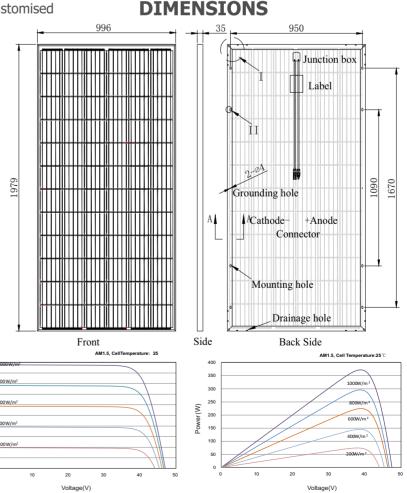




AES-DSH2019 V.002 All rights reserved. Specifications included in this data sheet are subject to change without notice.

PACKAGING INFORMATION

Packing configuration 64 pcs / double pallet Loading Capacity 704 pcs / 40HQ Size / pallet (mm) 2015x1120x2395 Weight 1464 kg / double pallet



Email: sales@ae-solar.com Web: www.ae-solar.com



HALF CELL TECHNOLOGY PV MODULES











TIER

AE HALF LARGE CELL MONOCRYSTALLINE PV MODULES AE HM6L-60 Series 320W-345W

tested by Fraunhofer

CS

120 CELLS













HIGHLY STABLE AND TOUGH



AE Solar photovoltaic modules are produced using high quality materials, automated robotic lines, German technology and standards.



PLUS-SORTING

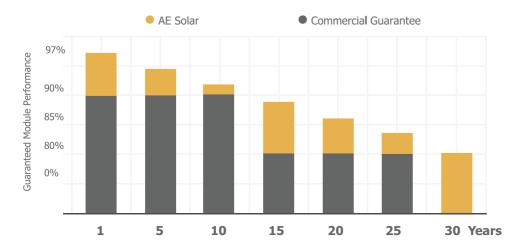
Higher yield due to plus-sorting from 0 up to +5 Wp guarantees the high system efficiency and yield stability.

PERFORMANCE GUARANTEE

AE Solar assures high investment, security and warranty claims by providing linear performance guarantee of 30 years and 12 years of product warranty.

CERTIFICATES

Lining with international standards, AE Solar Photovoltaic modules are tested and certified under extreme stress conditions and it can bear harsh environment influences.











AE HM6L-60 Series 320W-345W

SPECIFICATIONS		AE320HM6L-60	AE325HM6L-60	AE330HM6L-60	AE335HM6L-60	AE340HM6L-60	AE345HM6L-60	
Nominal Max. Power	Pmax (Wp)	320	325	330	335	340	345	
Maximum power voltage	Vmp(V)	33.61	33.89	34.17	34.44	34.69	34.95	
Maximum power current	Imp (A)	9.52	9.59	9.66	9.73	9.80	9.87	
Open-circuit voltage	Voc(V)	40.74	41.05	41.32	41.61	41.88	42.32	
Short-circuit current	Isc (A)	9.98	10.06	10.14	10.22	10.30	10.38	
Module efficiency	(%)	19.08	19.38	19.67	19.97	20.27	20.57	
Operating temperature	(°C)			-40 to	o +85			
Maximum system voltage DC	V (IEC)			15	00			
Maximum series fuse rating	(A)			1	5			
Power tolerance	(%)			0/+4	1.99			
Temp. coefficients of Pmax	(%/°C)			-0.3	438			
Temp. coefficients of Voc	(%/°C)			-0.2	722			
Temp. coefficients of Isc	(%/°C)	0.0353						
Nom. Operating cell temp.(NOCT)	(°C)			44	1±2			

The electrical data apply to standard test conditions (STC): Irradiance of 1000 W/m² with spectrum AM 1.5 and a cell temperature of 25°C.

MATERIAL CHARACTERISTICS

Cell type Mono-crystalline 158.75 x 79.38mm

No. of cells 120 (60 full cells) **Dimensions** 1692 x 996 x 35 MM

19 KG Weight

Junction box IP 68 rated

1 x 4.0mm,² 350 mm length or customised Output cable

MC 4 / MC 4 compatible Connector type Hail resistance Max. Ø 25 mm, at 23 m/s

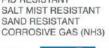
2400 Pa / 244 kg/m² Wind load 5400 Pa / 550 kg/m² Mechanical load

CERTIFICATES













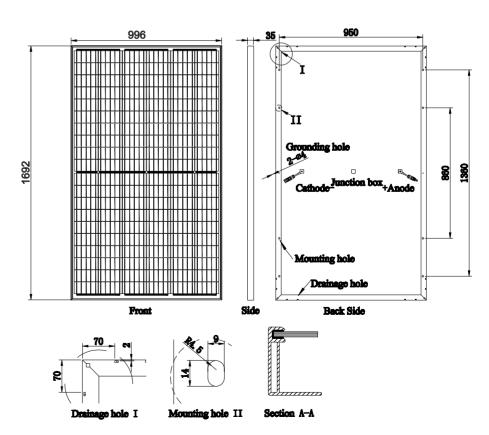




PACKAGING INFORMATION

Packing configuration 64 pcs / double pallet 832 pcs / 40HQ **Loading Capacity** Size / pallet (mm) 1725 x1135 x2395 Weight 1335 kg / pallet

DIMENSIONS



 $\label{eq:AES-DSH2019} AES-DSH2019 V.002 \\ All rights reserved. Specifications included in this data sheet are subject to change without notice.$





AE HALF LARGE CELL IEC 1500 VDC MONOCRYSTALLINE PV MODULES

AE HM6L-72 Series 390W-415W



CELLS





RESISTANT





AMMONIA RESISTANT RESISTANT



HIGHLY STABLE AND TOUGH



AE Solar photovoltaic modules are produced using high quality materials, automated robotic lines, German technology and standards.



PLUS-SORTING

Higher yield due to plus-sorting from 0 up to +5 Wp guarantees the high system efficiency and yield stability.

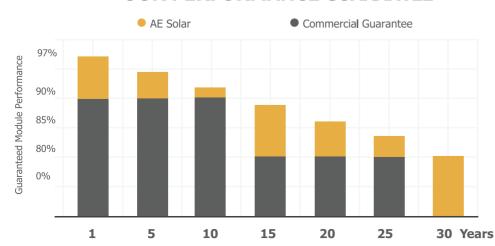
PERFORMANCE GUARANTEE

AE Solar assures high investment, security and warranty claims by providing linear performance guarantee of 30 years and 12 years of product warranty.



CERTIFICATES

Lining with international standards, AE Solar Photovoltaic modules are tested and certified under extreme stress conditions and it can bear harsh environment influences.











AE HM6L-72 Series 390W-415W

SPECIFICATIONS

SPECIFICATIONS		AE390HM6L-72	AE395HM6L-72	AE400HM6L-72	AE405HM6L-72	AE410HM6L-72	AE415HM6L-72
Nominal Max. Power	Pmax (Wp)	390	395	400	405	410	415
Maximum power voltage	Vmp(V)	40.79	41.06	41.32	41.59	41.85	42.09
Maximum power current	Imp (A)	9.56	9.62	9.68	9.74	9.80	9.86
Open-circuit voltage	Voc(V)	49.06	49.35	49.25	49.53	49.80	50.51
Short-circuit current	Isc (A)	10.10	10.17	10.24	10.31	10.37	10.44
Module efficiency	(%)	19.43	19.68	19.93	20.18	20.43	20.68
Operating temperature	(°C)			-40 to	+85		
Maximum system voltage DC	V (IEC)			15	500		
Maximum series fuse rating	(A)				15		
Power tolerance	(%)			0/+	4.99		
Temp. coefficients of Pmax	(%/°C)			-0.	352		
Temp. coefficients of Voc	(%/°C)			-0.	277		
Temp. coefficients of Isc	(%/°C)			0	.04		
Nom. Operating cell temp.(NOCT) (°C)			44	1±2		

The electrical data apply to standard test conditions (STC): Irradiance of 1000 W/m² with spectrum AM 1.5 and a cell temperature of 25°C.

MATERIAL CHARACTERISTICS

Cell type PERC Mono-crystalline 158.75 x 79.38mm

No. of cells 144 (72 Full cells)
Dimensions 2015 x 996 x 35 MM

Weight 21 KG

Junction box IP 68 rated

Output cable 1 x 4.0mm,² 350 mm length or customised

Connector type MC4 / MC4 compatible

Hail resistance Max. Ø 25 mm, at 23 m/s

Wind load 2400 Pa / 244 kg/m² Mechanical load 5400 Pa / 550 kg/m²

CERTIFICATES









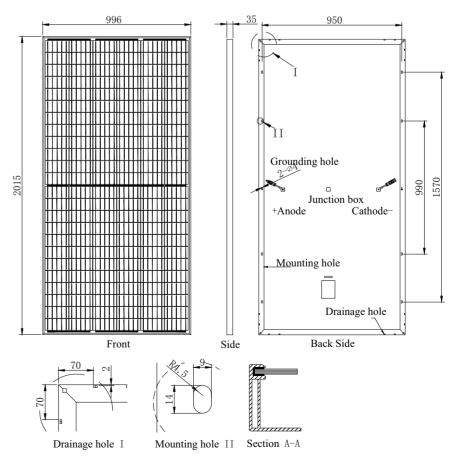




PACKAGING INFORMATION

Packing configuration 64 pcs / double pallet Loading Capacity 704 pcs / 40HQ
Size / pallet (mm) 2045 x 1120 x 2395
Weight 1495 kg / pallet

DIMENSIONS



AES-DSH2019 V.002 All rights reserved. Specifications included in this data sheet are subject to change without notice.







HALF LARGE CELL IEC 1500VDC MONOCRYSTALLINE PV MODULES AE HM6L-72 Series 430W-450W



144 **CELLS**



SALT CORROSION RESISTANT



SAND **RESISTANT**



AMMONIA RESISTANT



HIGHLY STABLE AND TOUGH



Hot spot temperature lower than 85°C The IEC61215 test shows that with a zero percentage, a small and a 100 percentage of shaded area, respectively hot spots will not exceed 85°C, which is the maximum operating condition.



Instantly reduced temperature, thus eliminating material hazard and ensuring more safety of the module, preventing fire risks caused by hot spots.

GERMAN QUALITY

AE Solar photovoltaic modules are produced using high quality materials, automated robotic lines, German technology and standards.

PERFORMANCE GUARANTEE

AE Solar assures high investment, security and warranty claims by providing linear performance guarantee of 30 years and 12 years of product warranty.

RELIABILITY

Bypass diodes prevent cells mismatching at shaded areas. The lower temperature of hot-spot free modules will eliminate potential cause for back sheet degradation, hence enhancing reliability for longer term.

HIGH RETURNS

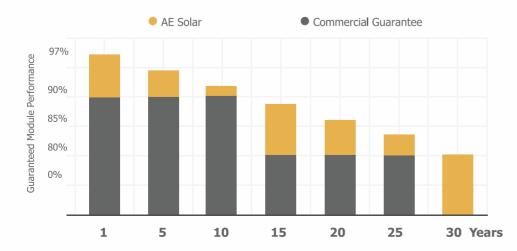
This new technology prevents instant falls in the module output, thus increasing the performance ratio up to 30% and return for all types of installations.

PLUS-SORTING

Higher yield due to plus-sorting from 0 up to +5 Wp guarantees the high system efficiency and yield stability.

CERTIFICATES

Lining with international standards, AE Solar Photovoltaic modules are tested and certified under extreme stress conditions and it can bear harsh environment influences.











AE HM6L-72 Series 430W-450W

SPECIFICATIONS

SPECIFICATIONS		AE430HM6L-72	AE435HM6L-72	AE440HM6L-72	AE445HM6L-72	AE450HM6L-72	
Nominal Max. Power	Pmax (Wp)	430	435	440	445	450	
Maximum power voltage	Vmp(V)	40.6	40.8	41.0	41.2	41.4	
Maximum power current	Imp (A)	10.60	10.67	10.74	10.80	10.87	
Open-circuit voltage	Voc(V)	49.2	49.4	49.6	49.8	50.0	
Short-circuit current	Isc (A)	11.19	11.26	11.33	11.46	11.54	
Module efficiency	(%)	19.8	20.0	20.2	20.5	20.7	
Operating temperature	(°C)			-40 to +85			
Maximum system voltage DC	V (IEC)			1500			
Maximum series fuse rating	(A)			20			
Power tolerance	(%)			0/+4.99			
Temp. coefficients of Pmax	(%/°C)			-0.370			
Temp. coefficients of Voc	(%/°C)			-0.286			
Temp. coefficients of Isc	(%/°C)			0.057			
Nom. Operating cell temp.(NOCT)) (°C)			45±2			

The electrical data apply to standard test conditions (STC): Irradiance of 1000 W/m² with spectrum AM 1.5 and a cell temperature of 25°C.

MATERIAL CHARACTERISTICS

Cell type Mono-crystalline 166*83 mm

No. of cells 144 Cells (72 Full Cells)

Dimensions 2094 x 1038 x 35 mm

Weight 23KG

Junction box IP 68 rated (3 bypass diodes)

Output cable 1 x 4.0mm², 350 mm length or customised

Connector type MC4 / MC4 compatible

Hail resistance Max. Ø 25 mm, at 23 m/s

Wind load 2400 Pa / 244 kg/m² Mechanical load 5400 Pa / 550 kg/m²

CERTIFICATES











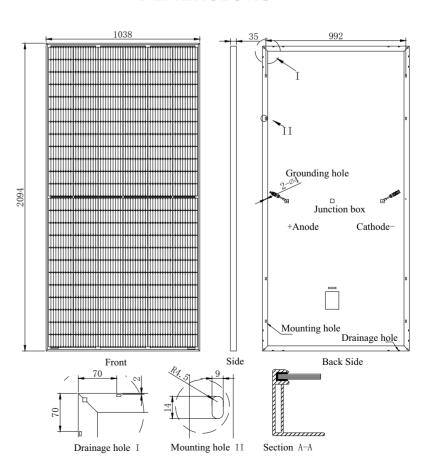




PACKAGING INFORMATION

Packing configuration 62 pcs / double pallet
Loading Capacity 682 pcs / 40HQ
Size / pallet (mm) 2125x1135x2415
Weight 1550kg /double pallet

DIMENSIONS



 $\label{eq:AES-DSH2019} \ V.002 \\ \ \ \text{All rights reserved. Specifications included in this data sheet are subject to change without notice.}$

Tel.: +49 8231 92 92 52 2 Fax: +49 8231 97 82 68 9 Email: sales@ae-solar.com Web: www.ae-solar.com







AF HALF LARGE CELL MONOCRYSTALLINE PV MODULES AE HM6L-60 Series 450W-460W

tested by Fraunhofer

CSP

120 **CELLS**









RESISTANT



AMMONIA RESISTANT



HIGHLY STABLE AND TOUGH



AE Solar photovoltaic modules are produced using high quality materials, automated robotic lines, German technology and standards.



PLUS-SORTING

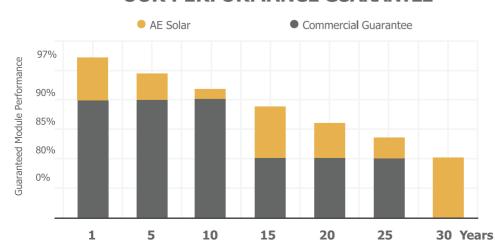
Higher yield due to plus-sorting from 0 up to +5 Wp guarantees the high system efficiency and yield stability.

PERFORMANCE GUARANTEE

AE Solar assures high investment, security and warranty claims by providing linear performance quarantee of 30 years and 12 years of product warrantv.

CERTIFICATES

Lining with international standards, AE Solar Photovoltaic modules are tested and certified under extreme stress conditions and it can bear harsh environment influences.











AE HM6L-60 Series 450W-460W

SPECIFICATIONS					
SPECIFICATIONS		AE450HM6L-60	AE455HM6L-60	AE460HM6L-60	
Nominal Max. Power	Pmax (Wp)	450	455	460	
Maximum power voltage	Vmp(V)	35.13	35.38	35.60	
Maximum power current	Imp (A)	12.81	12.86	12.92	
Open-circuit voltage	Voc(V)	41.98	42.29	42.60	
Short-circuit current	Isc (A)	13.57	13.62	13.67	
Module efficiency	(%)	20.8	21	21.3	
Operating temperature	(°C)		-40 to +85		
Maximum system voltage DC	V (IEC)		1500		
Maximum series fuse rating	(A)		25		
Power tolerance	(%)		0/+4.99		
Temp. coefficients of Pmax	(%/°C)		-0.35		
Temp. coefficients of Voc	(%/°C)		-0.275		
Temp. coefficients of Isc	(%/°C)		0.045		
Nom. Operating cell temp.(NOCT)	(°C)		45±2		

The electrical data apply to standard test conditions (STC): Irradiance of 1000 W/m² with spectrum AM 1.5 and a cell temperature of 25°C.

Drainage hole I

MATERIAL CHARACTERISTICS

Mono-crystalline 182 x 91 mm Cell type

No. of cells 120 (60 full cells)

1910 x 1133 x 35 MM **Dimensions**

Weight 24 KG

Junction box IP 68 rated

1 x 4.0mm,² 350 mm length or customised Output cable

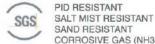
MC 4 / MC 4 compatible Connector type Hail resistance Max. Ø 25 mm, at 23 m/s

2400 Pa / 244 kg/m² Wind load 5400 Pa / 550 kg/m² Mechanical load

CERTIFICATES















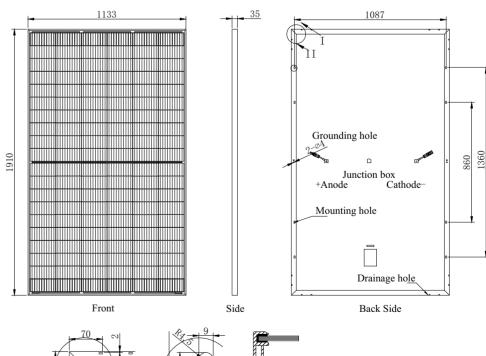




PACKAGING INFORMATION

Packing configuration 60 pcs / double pallet **Loading Capacity** 720 pcs / 40HQ Size / pallet (mm) 1945 x1135 x2490 Weight 1550 kg / double pallet

DIMENSIONS



Section A-A

Mounting hole II

 $\label{eq:AES-DSH2019} AES-DSH2019 V.002 \\ All rights reserved. Specifications included in this data sheet are subject to change without notice.$







AF HALF LARGE CELL MONOCRYSTALLINE PV MODULES AE HM6L-66 Series 495W-505W

tested by Fraunhofer

CSP

CELLS









RESISTANT



AMMONIA RESISTANT



HIGHLY STABLE AND TOUGH



AE Solar photovoltaic modules are produced using high quality materials, automated robotic lines, German technology and standards.



PLUS-SORTING

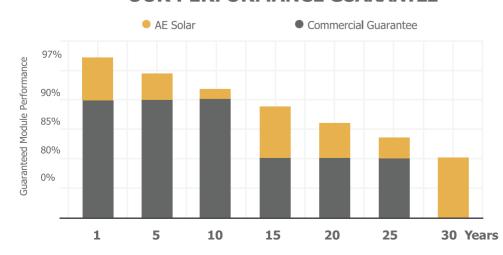
Higher yield due to plus-sorting from 0 up to +5 Wp guarantees the high system efficiency and yield stability.

PERFORMANCE GUARANTEE

AE Solar assures high investment, security and warranty claims by providing linear performance quarantee of 30 years and 12 years of product warrantv.

CERTIFICATES

Lining with international standards, AE Solar Photovoltaic modules are tested and certified under extreme stress conditions and it can bear harsh environment influences.











AE HM6L-66 Series 495W-505W

SPECIFICATIONS		AE495HM6L-66	AE500HM6L-66	AE505HM6L-66	
		AL4931 IIVIOL-00	ALGOOI IIVIOL-00	ALGOGI IIVIGE-00	
Nominal Max. Power	Pmax (Wp)	495	500	505	
Maximum power voltage	Vmp(V)	38.79	39.03	39.27	
Maximum power current	Imp (A)	12.76	12.81	12.86	
Open-circuit voltage	Voc(V)	46.34	46.64	46.93	
Short-circuit current	Isc (A)	13.52	13.57	13.62	
Module efficiency	(%)	20.9	21.1	21.3	
Operating temperature	(°C)		-40 to +85		
Maximum system voltage DC	V (IEC)		1500		
Maximum series fuse rating	(A)		25		
Power tolerance	(%)		0/+4.99		
Temp. coefficients of Pmax	(%/°C)		-0.35		
Temp. coefficients of Voc	(%/°C)		-0.275		
Temp. coefficients of Isc	(%/°C)		0.045		
Nom. Operating cell temp.(NOCT)	(°C)		45±2		

The electrical data apply to standard test conditions (STC): Irradiance of 1000 W/m² with spectrum AM 1.5 and a cell temperature of 25°C.

MATERIAL CHARACTERISTICS

Cell type Mono-crystalline 182 x 91 mm

No. of cells 132 (66 full cells)

Dimensions 2094 x 1133 x 35 MM

Weight 26 KG

Junction box IP 68 rated

Output cable 1 x 4.0mm,² 350 mm length or customised

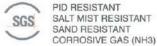
Connector type MC 4 / MC 4 compatible
Hail resistance Max. Ø 25 mm, at 23 m/s

Wind load 2400 Pa / 244 kg/m² Mechanical load 5400 Pa / 550 kg/m²

CERTIFICATES











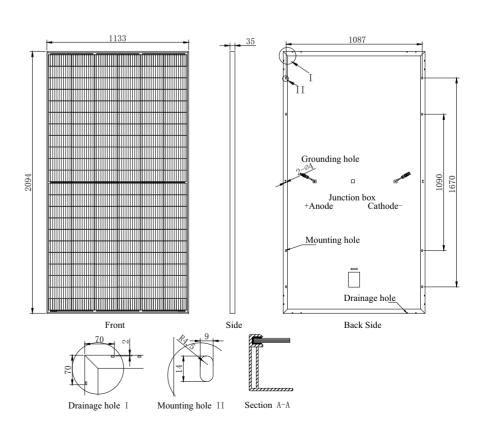




PACKAGING INFORMATION

Packing configuration 60 pcs / double pallet
Loading Capacity 660 pcs / 40HQ
Size / pallet (mm) 2125 x1135 x2490
Weight 1680 kg / double pallet

DIMENSIONS



 $\label{eq:AES-DSH2019} AES-DSH2019 V.002 \\ All rights reserved. Specifications included in this data sheet are subject to change without notice.$

Tel.: +49 8231 92 92 52 2 Fax: +49 8231 97 82 68 9 Email: sales@ae-solar.com Web: www.ae-solar.com







AE HALF LARGE CELL BIFACIAL MONOCRYSTALLINE PV MODULES WITH TRANSPARENT BACKSHEET AE HM6L-72 Series 525W-550



CSP

144 **CELLS**











AMMONIA RESISTANT



HIGHLY STABLE AND TOUGH



Hot spot temperature lower than 85°C The IEC61215 test shows that with a zero percentage, a small and a 100 percentage of shaded area, respectively hot spots will not exceed 85°C, which is the maximum operating condition.



SAFETY

Instantly reduced temperature, thus eliminating material hazard and ensuring more safety of the module, preventing fire risks caused by hot spots.



AE Solar photovoltaic modules are produced using high quality materials, automated robotic lines, German technology and standards.

PERFORMANCE GUARANTEE

AE Solar assures high investment, security and warranty claims by providing linear performance guarantee of 30 years and 12 years of product warranty.

RELIABILITY

Bypass diodes prevent cells mismatching at shaded areas. The lower temperature of hot-spot free modules will eliminate potential cause for back sheet degradation, hence enhancing reliability for longer term.

HIGH RETURNS

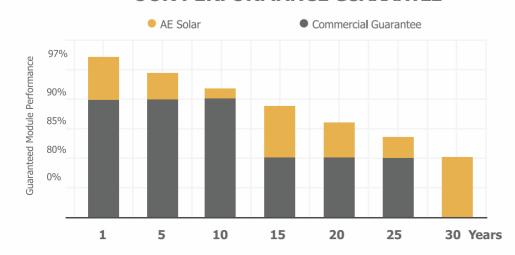
This new technology prevents instant falls in the module output, thus increasing the performance ratio up to 30% and return for all types of installations.

PLUS-SORTING

Higher yield due to plus-sorting from 0 up to +5 Wp guarantees the high system efficiency and yield stability.

CERTIFICATES

Lining with international standards, AE Solar Photovoltaic modules are tested and certified under extreme stress conditions and it can bear harsh environment influences.











AE HM6L-72 Series 525W-550W

SPECIFICATIONS

AE525HM6L-72 AE530HM6L-72 AE535HM6L-72 AE540HM6L-72 AE545HM6L-72 AE550HM6L-72

Nominal Max. Power	Pmax (Wp)	525	530	535	540	545	550		
Maximum power voltage	Vmp(V)	41.47	41.70	41.93	42.16	42.57	42.98		
Maximum power current	Imp (A)	12.66	12.71	12.76	12.81	12.86	12.92		
Open-circuit voltage	Voc(V)	49.50	49.65	49.78	49.90	50.01	51.44		
Short-circuit current	Isc (A)	13.42	13.47	13.52	13.57	13.62	13.67		
Module efficiency	(%)	20.3	20.5	20.7	20.9	21.1	21.3		
Operating temperature	(°C)	-40 to +85							
Maximum system voltage DC	V (IEC)	1500							
Maximum series fuse rating	(A)			2	5				
Power tolerance	(%)			0/+4	1.99				
Temp. coefficients of Pmax	(%/°C)			-0.3	350				
Temp. coefficients of Voc	(%/°C)	-0.275							
Temp. coefficients of Isc	(%/°C)	0.045							
Nom. Operating cell temp.(NOCT	(°C)			45	±2				

The electrical data apply to standard test conditions (STC): Irradiance of 1000 W/m² with spectrum AM 1.5 and a cell temperature of 25°C.

MATERIAL CHARACTERISTICS

Cell type Mono-crystalline 182 X 91 mm

No. of cells 144 Cells (72 Full Cells)

Dimensions 2278 X 1133 X 35

Weight 27KG

Junction box IP 68 rated (3 bypass diodes)

Output cable 1 x 4.0mm², 350 mm length or customised

Connector type MC4 / MC4 compatible

Hail resistance Max. Ø 25 mm, at 23 m/s

Wind load 2400 Pa / 244 kg/m 2 Mechanical load 5400 Pa / 550 kg/m 2

CERTIFICATES







PID RESISTANT SALT MIST RESISTANT SAND RESISTANT CORROSIVE GAS (NH3)





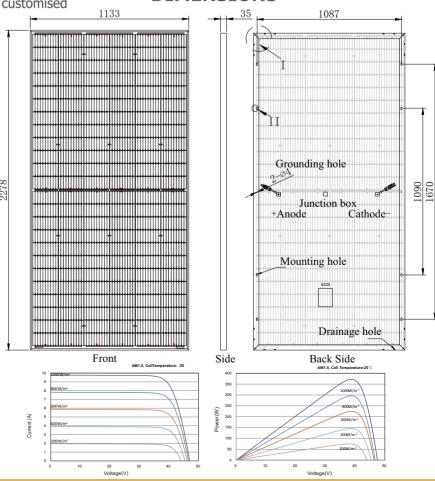




PACKAGING INFORMATION

Packing configuration 60 pcs / double pallet
Loading Capacity 600 pcs / 40HQ
Size / pallet (mm) 2310x1135x2490
Weight 1750 kg /double pallet

DIMENSIONS



 $\label{eq:AES-DSH2019} AES-DSH2019\ V.002$ All rights reserved. Specifications included in this data sheet are subject to change without notice.

Tel.: +49 8231 92 92 52 2 Fax: +49 8231 97 82 68 9 Email: sales@ae-solar.com Web: www.ae-solar.com



AE DOUBLE-GLASS PV MODULES













AE DOUBLE GLASS LARGE CELL MONOCRYSTALLINE PV MODULES AE HM6-60 Series 315W-335W THE LIGHTWEIGHT TECHNOLOGY

60















CELLS

MICRO-CRACK FIRE CLASS

SALT CORROSION RESISTANT

RESISTANT

AMMONIA RESISTANT **HIGHLY STABLE AND TOUGH**



AE Solar photovoltaic modules are produced using high quality materials, automated robotic lines, German technology and standards.

HIGH RETURNS

This technology increases the performance ratio, eliminates the potential hazards and material degradation, ensures better safety, long life and high investment returns.

PERFORMANCE GUARANTEE

AE Solar assures high investment, security and warranty claims by providing linear performance guarantee of 30 years and 12 years of product warranty.

PLUS-SORTING

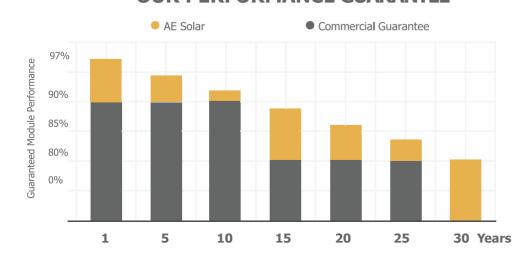
Higher yield due to plus-sorting from 0 up to +5 Wp quarantees the high system efficiency and yield stability.

SAFETY

Back sheet is replaced by 2 mm tempered glass, ensuring additional safety, no back sheet degradation and surface for heat loss. Lower temperature offers better and more stable output during high temperature conditions.

CERTIFICATES

Lining with international standards, AE Solar Photovoltaic modules are tested and certified under extreme stress conditions and it can bear harsh environment influences.











AF HM6-60 Series 315W-335W

CDECTETCATIONS		AE ΠΙΝΙΟ-ΟΙ) 26Hez 212M-2	3344		
SPECIFICATIONS		AE315 HM6-60	AE320HM6-60	AE325HM6-60	AE330HM6-60	AE335HM6-60
Nominal Max. Power	Pmax (Wp)	315	320	325	330	335
Maximum power voltage	Vmp(V)	33.20	33.40	33.61	33.81	34.02
Maximum power current	Imp (A)	9.49	9.59	9.68	9.76	9.85
Open-circuit voltage	Voc(V)	40.70	40.90	41.10	41.31	41.49
Short-circuit current	Isc (A)	10.04	10.15	10.20	10.37	10.49
Module efficiency	(%)	18.71	19.01	19.31	19.60	19.90
Power tolerance	Pmax (Wp)			0 / +4.99		
Maximum system voltage DC	(V)			1500		
Maximum series fuse rating	(A)			15		
Operating temperature	(°C)			-40 to +85		
Temp. coefficients of Pmax	(%/°C)			-0.37		
Temp. coefficients of Voc	(%/°C)			-0.28		
Temp. coefficients of Isc	(%/°C)			0.048		
Nom. Operating cell temp.(NOCT)	(°C)			45±2		

The electrical data apply to standard test conditions (STC): Irradiance of 1000 W/m² with spectrum AM 1.5 and a cell temperature of 25°C.

MATERIAL CHARACTERISTICS

Cell Type Mono-crystalline

Cell Dimension 158.75mm x 158.75mm

Dimensions 1680mm x 1002mm x 6mm (J-box not included)

Weight 23.5 kg

Front Glass 2.5 mm tempered AR glass

Encapsulant POE

Back Glass 2.5 mm tempered glass / 2.5 mm ceramic coated glass

IP68 (three bypass diodes) Junction Box

Cable 4.0mm², 300mm length or costumised

QC 4. 10-35 Connector

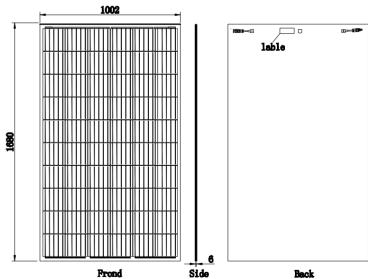
2400Pa / 244kg / m² Wind load 5400Pa / 550kg / m² Mechanical load

Packing configuration 832 pcs / 40HQ Loading capacity Size / pallet (mm) 1790 x 1115 x 2316 Weight 1650 kg / double pallet

64 pcs / double pallet

PACKAGING INFORMATION

DIMENSIONS



CERTIFICATES





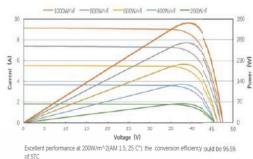








AES-DSH2019 V.002 All rights reserved. Specifications included in this data sheet are subject to change without notice.



AE SOLAR

Fax: +49 8231 97 82 68 9 Email: sales@ae-solar.com Web: www.ae-solar.com





AE DOUBLE GLASS LARGE CELL MONOCRYSTALLINE PV MODULES AE HM6-72 Series 380W-400W THE LIGHTWEIGHT TECHNOLOGY

72 CELLS











NH₃



MICRO-CRACK FIRE CLASS
FREE A

PID

SALT CORROSION RESISTANT

SAND RESISTANT AMMONIA RESISTANT

HIGHLY STABLE AND TOUGH



AE Solar photovoltaic modules are produced using high quality materials, automated robotic lines, German technology and standards.

HIGH RETURNS

This technology increases the performance ratio, eliminates the potential hazards and material degradation, ensures better safety, long life and high investment returns.

🤼 PERFORMANCE GUARANTEE

AE Solar assures high investment, security and warranty claims by providing linear performance guarantee of 30 years and 12 years of product warranty.

PLUS-SORTING

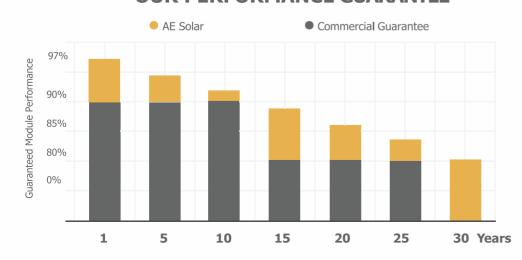
Higher yield due to plus-sorting from 0 up to +5 Wp guarantees the high system efficiency and yield stability.

SAFETY

Back sheet is replaced by 2 mm tempered glass, ensuring additional safety, no back sheet degradation and surface for heat loss. Lower temperature offers better and more stable output during high temperature conditions.

CERTIFICATES

Lining with international standards, AE Solar Photovoltaic modules are tested and certified under extreme stress conditions and it can bear harsh environment influences.











AF HM6-72 Series 380W-400W

	/ L 111 10 /	TII-10-72 Series 300W +00W							
	AE 380HM6-72	AE385HM6-72	AE390HM6-72	AE395HM6-72	AE400HM6-72				
Pmax (Wp)	380	385	390	395	400				
Vmp(V)	40.50	40.80	41.10	41.40	41.62				
Imp (A)	9.39	9.44	9.49	9.55	9.61				
Voc(V)	48.90	49.10	49.30	49.50	49.70				
Isc (A)	9.75	9.92	10.12	10.23	10.32				
(%)	18.94	19.19	19.44	19.69	19.94				
Pmax (Wp)			0 / +4.99						
(V)			1500						
(A)			15						
(°C)			-40 to +85						
(%/°C)			-0.37						
(%/°C)			-0.28						
(%/°C)			0.048						
(°C)			45±2						
	Vmp(V) Imp (A) Voc(V) Isc (A) (%) Pmax (Wp) (V) (A) (°C) (%/°C) (%/°C)	Pmax (Wp) 380 Vmp(V) 40.50 Imp (A) 9.39 Voc(V) 48.90 Isc (A) 9.75 (%) 18.94 Pmax (Wp) (V) (A) (°C) (%/°C) (%/°C) (%/°C)	AE380HM6-72 AE385HM6-72 Pmax (Wp) 380 385 Vmp(V) 40.50 40.80 Imp (A) 9.39 9.44 Voc(V) 48.90 49.10 Isc (A) 9.75 9.92 (%) 18.94 19.19 Pmax (Wp) (V) (A) (°C) (%/°C) (%/°C) (%/°C) (%/°C) (%/°C) (%/°C) (%/°C) (%/°C)	Pmax (Wp) 380 385 390 Vmp(V) 40.50 40.80 41.10 Imp (A) 9.39 9.44 9.49 Voc(V) 48.90 49.10 49.30 Isc (A) 9.75 9.92 10.12 (%) 18.94 19.19 19.44 Pmax (Wp) 0 / +4.99 0 / +4.99 (V) 1500 15 (A) 15 -40 to +85 (%/°C) -0.37 -0.28 (%/°C) 0.048	Pmax (Wp) 380 385 390 395 Vmp(V) 40.50 40.80 41.10 41.40 Imp (A) 9.39 9.44 9.49 9.55 Voc(V) 48.90 49.10 49.30 49.50 Isc (A) 9.75 9.92 10.12 10.23 (%) 18.94 19.19 19.44 19.69 Pmax (Wp) 0 / +4.99 0 / +4.99 (V) 1500 (A) 15 -40 to +85 -0.37 (%/°C) -0.28 -0.28 0.048				

The electrical data apply to standard test conditions (STC): Irradiance of 1000 W/m² with spectrum AM 1.5 and a cell temperature of 25°C.

MATERIAL CHARACTERISTICS

Cell Type Mono-crystalline

158.75mm x 158.75mm Cell Dimension

Dimensions 2002mm x 1002mm x 6mm (J-box not included)

Weight 28kg

2.5 mm tempered AR glass Front Glass

POE Encapsulant

Back Glass 2.5 mm tempered glass / 2.5 mm ceramic coated glass

Junction Box IP68 (three bypass diodes)

4.0mm², 300mm length or costumised Cable

Connector QC 4. 10-35

2400Pa / 244kg / m² Wind load 5400Pa / 550kg / m² Mechanical load

CERTIFICATES













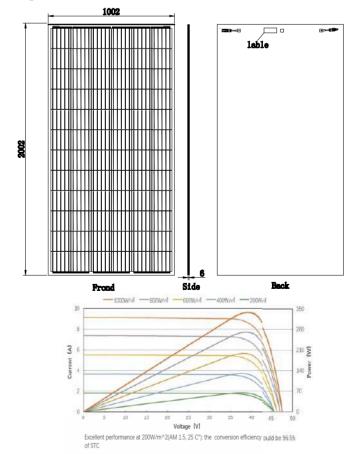
 $\label{eq:AES-DSH2019} AES-DSH2019\ V.002 \\ \mbox{All rights reserved. Specifications included in this } \mbox{ data sheet are subject to change without notice.}$

PACKAGING INFORMATION

Packing configuration Loading capacity Size / pallet (mm) Weight

64 pcs / double pallet 704 pcs / 40HQ 2110 x 1115 x 2316 1970 kg / double pallet

DIMENSIONS



AE SOLAR

Fax: +49 8231 97 82 68 9 Email: sales@ae-solar.com Web: www.ae-solar.com

Core values

Reliability •••

The best way to verify photovoltaic modules reliability is to observe its performance in a power plant. Modules must be able to withstand any external environmental factors and resist all types of natural stresses as they ultimately affect the power plant's performance and investment IRR.

We put a selection of PV modules through extreme

environmental testing to ensure reliability and superior performance in even the world's most unforgiving conditions. E=1000WA



AE POWER PLUS PV MODULES

















AE POWERPLUS MONOCRYSTALLINE PV MODULES AE M6-36 Series 165W-195W



36 **CELLS**





RESISTANT



SALT CORROSION RESISTANT



SAND RESISTANT



AMMONIA RESISTANT



HIGHLY STABLE AND TOUGH

GERMAN QUALITY

AE Solar photovoltaic modules are produced using high quality materials, automated robotic lines, German technology and standards.

PERFORMANCE GUARANTEE

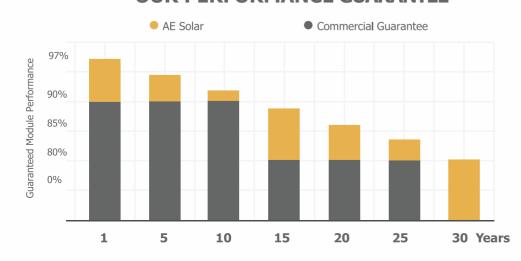
AE Solar assures high investment, security and warranty claims by providing linear performance guarantee of 30 years and 12 years of product warranty.

PLUS-SORTING

Higher yield due to plus-sorting from 0 up to +5 Wp guarantees the high system efficiency and yield stability.

CERTIFICATES

Lining with international standards, AE Solar Photovoltaic modules are tested and certified under extreme stress conditions and it can bear harsh environment influences.











AE M6-36 Series 165W-195W

SPECIFICATIONS		AE165M6-36	AE170M6-36	AE175M6-36	AE180M6-36	AE185M6-36	AE190M6-36	AE195M6-36
Nominal Max. Power	Pmax (Wp)	165	170	175	180	185	190	195
Maximum power voltage	Vmp(V)	18.93	19.35	19.76	20.18	20.59	21.01	21.41
Maximum power current	Imp (A)	8.71	8.79	8.85	8.92	8.98	9.04	9.11
Open-circuit voltage	Voc(V)	23.02	23.23	23.44	23.64	23.85	24.06	24.27
Short-circuit current	Isc (A)	9.41	9.47	9.55	9.59	9.65	9.73	9.79
Module efficiency	(%)	16.64	17.14	17.65	18.15	18.66	19.16	19.67
Power tolerance	Pmax (Wp)				0 / + 4.99			
Maximum system voltage DC	(V)				1000			
Maximum series fuse rating	(A)				15			
Operating temperature	(°C)				-40 to +85			
Temp. coefficients of Pmax	(%/°C)				-0.38			
Temp. coefficients of Voc	(%/°C)				-0.29			
Temp. coefficients of Isc	(%/°C)				0.05			
Nom. Operating cell temp.(NOCT)	(°C)				45±2			

The electrical data apply to standard test conditions (STC): Irradiance of 1000 W/m² with spectrum AM 1.5 and a cell temperature of 25°C.

MATERIAL CHARACTERISTICS

Cell type Mono-crystalline 156.75mm × 156.75mm

No. of cells 36 (4 x 9)

Dimensions $1480 \times 670 \times 35 \text{ mm}$

Weight 10.8 kg
Junction box IP 67 rated

Output cable 1 x 4.0mm², 900mm length or customised

Connector type MC 4 / MC 4 compatible Hail resistance Max. Ø 28 mm, at 23 m/s

Wind load 2400 Pa / 244 kg/m² Mechanical load 5400 Pa / 550 kg/m²

CERTIFICATES

















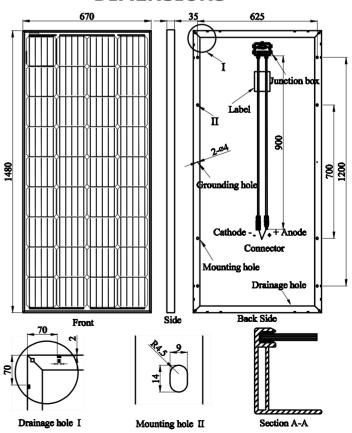
FOR INNOVATIVE SHADING RESISTANT MODULES DEVELOPMENT

AES-DSH2019 V.002 All rights reserved. Specifications included in this data sheet are subject to change without notice.

PACKAGING INFORMATION

Packing configuration 90 pcs / double pallet
Loading Capacity 1350 pcs / 40HQ
Size / pallet (mm) 1510 x 1135 x 2370
Weight 1107 kg / double pallet

DIMENSIONS







PERC Technology

AE POWERPLUS

MONOCRYSTALLINE PV MODULES AE M6-60 Series 300W-320W

60 **CELLS**









SAND RESISTANT NH,

AMMONIA RESISTANT



HIGHLY STABLE AND TOUGH

GERMAN QUALITY

AE Solar photovoltaic modules are produced using high quality materials, automated robotic lines, German technology and standards.

PERFORMANCE GUARANTEE

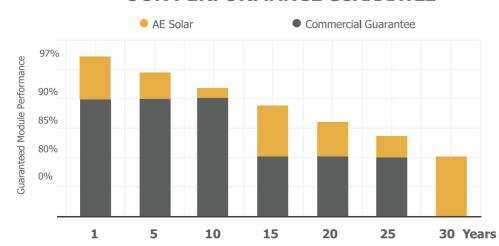
AE Solar assures high investment, security and warranty claims by providing linear performance guarantee of 30 years and 12 years of product warranty.

PLUS-SORTING

Higher yield due to plus-sorting from 0 up to +5 Wp guarantees the high system efficiency and yield stability.

CERTIFICATES

Lining with international standards, AE Solar Photovoltaic modules are tested and certified under extreme stress conditions and it can bear harsh environment influences.











ΔF M6-60 Series 300\N/-320\N/

SPECIFICATIONS								
SPECIFICATIONS		AE300M6-60	AE305M6-60	AE310M6-60	AE315M6-60	AE320M6-60		
Nominal Max. Power	Pmax (Wp)	300	305	310	315	320		
Maximum power voltage	Vmp(V)	33.59	34.01	34.42	34.84	35.19		
Maximum power current	Imp (A)	8.93	8.97	9.01	9.04	9.11		
Open-circuit voltage	Voc(V)	39.36	39.56	39.77	39.98	40.21		
Short-circuit current	Isc (A)	9.62	9.66	9.71	9.77	9.83		
Module efficiency	(%)	18.33	18.63	18.94	19.24	19.55		
Power tolerance	Pmax (Wp)			0 / + 5				
Maximum system voltage DC	(V)	1000						
Operating temperature	(°C)			-40 to +85				
Temp. coefficients of Pmax	(%/°C)	-0.38						
Temp. coefficients of Voc	(%/°C)	-0.29						
Temp. coefficients of Isc	(%/°C)	0.05						
Nom. Operating cell temp.(NOCT)	(°C)			45±2				

The electrical data apply to standard test conditions (STC): Irradiance of 1000 W/m² with spectrum AM 1.5 and a cell temperature of 25°C.

MATERIAL CHARACTERISTICS

Cell type Mono-crystalline 156.75mm × 156.75mm

No. of cells 60 (6 x 10)

1650 x 992 x 35mm **Dimensions**

Weight 17.5 kg

IP 67 MC 4 compatible Junction box

Output cable 1 x 4.0mm², 900mm length or customised

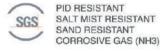
Connector type MC 4/MC 4 compatible Max. Ø 28 mm, at 23 m/s Hail resistance

Wind load 2400 Pa / 244 kg/m² 5400 Pa / 550 kg/m² Mechanical load

CERTIFICATES



















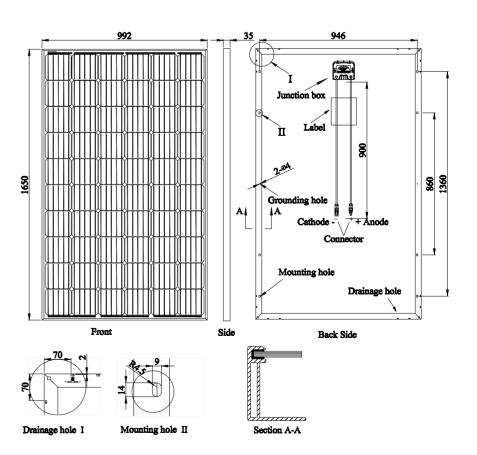
$\label{eq:AES-DSH2019} AES-DSH2019 V.002 \\ All rights reserved. Specifications included in this \ data sheet are subject to change without notice.$

PACKAGING INFORMATION

Packing configuration **Loading Capacity** Size / pallet (mm) Weight

64 pcs/double pallet 896 pcs / 40HQ 1685 X 1135 X 2390 mm 1220 kg / double pallet

DIMENSIONS







PERC Technology **AE POWERPLUS**

MONOCRYSTALLINE PV MODULES AE M6-72 Series 365W-385W





CELLS











AMMONIA RESISTANT



CSP

HIGHLY STABLE AND TOUGH



AE Solar photovoltaic modules are produced using high quality materials, automated robotic lines, German technology and standards.



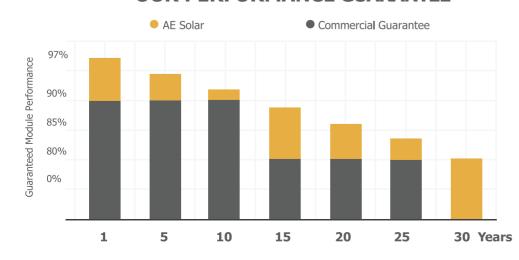
AE Solar assures high investment, security and warranty claims by providing linear performance guarantee of 30 years and 12 years of product warranty.

PLUS-SORTING

Higher yield due to plus-sorting from 0 up to +5 Wp guarantees the high system efficiency and yield stability.

CERTIFICATES

Lining with international standards, AE Solar Photovoltaic modules are tested and certified under extreme stress conditions and it can bear harsh environment influences.











AE M6-72 Series 365W-385W

SPECIFICATIONS		AE365M6-72	AE370M6-72	AE375M6-72	AE380M6-72	AE385M6-72
Nominal Max. Power	Pmax (Wp)	365	370	375	380	385
Maximum power voltage	Vmp(V)	39.58	39.63	39.66	39.71	39.73
Maximum power current	Imp (A)	9.22	9.34	9.46	9.57	9.69
Open-circuit voltage	Voc(V)	47.42	47.48	47.53	47.59	47.81
Short-circuit current	Isc (A)	9.65	9.69	9.75	9.82	9.95
Module efficiency	(%)	18.81	19.07	19.33	19.58	19.84
Power tolerance	Pmax (Wp)			0 / + 4.99		
Maximum system voltage DC	(V)			1000		
Maximum series fuse rating	(A)			15		
Operating temperature	(°C)			-40 to +85		
Temp. coefficients of Pmax	(%/°C)			-0.38		
Temp. coefficients of Voc	(%/°C)			-0.29		
Temp. coefficients of Isc	(%/°C)			0.05		
Nom. Operating cell temp.(NOCT)	(°C)			45±2		

The electrical data apply to standard test conditions (STC): Irradiance of 1000 W/m² with spectrum AM 1.5 and a cell temperature of 25°C.

MATERIAL CHARACTERISTICS

Cell type Mono-crystalline 156.75mm × 156.75mm

No. of cells 72 (6 x 12)

Dimensions 1956 x 992 x 35 mm

Weight 21 kg

Junction box IP 67 rated

Output cable 1 x 4.0mm², 1200mm length or customised

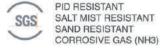
Connector type MC 4 / MC 4 compatible
Hail resistance Max. Ø 28 mm, at 23 m/s

Wind load 2400 Pa / 244 kg/m 2 Mechanical load 5400 Pa / 550 kg/m 2

CERTIFICATES













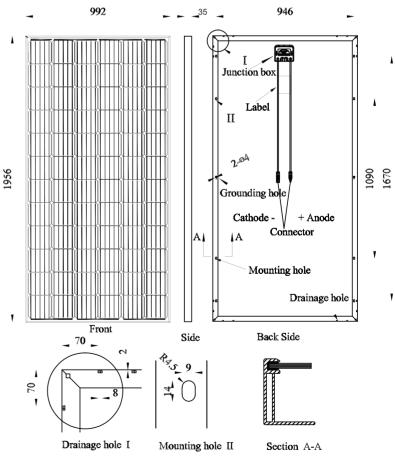


AES-DSH2019 V.002 All rights reserved. Specifications included in this $\,$ data sheet are subject to change without notice.

PACKAGING INFORMATION

Packing configuration 64 pcs / double pallet Loading Capacity 768 pcs / 40HQ Size / pallet (mm) 1985 x 1120 x 2390 Weight 1395 kg / pallet

DIMENSIONS



Tel.: +49 8231 92 92 52 2 Fax: +49 8231 97 82 68 9 Email: sales@ae-solar.com Web: www.ae-solar.com





AE POWERPLUS POLYCRYSTALLINE PV MODULES AE P6-36 Series 155W-175W



36 **CELLS**











AMMONIA RESISTANT



HIGHLY STABLE AND TOUGH

GERMAN QUALITY

AE Solar photovoltaic modules are produced using high quality materials, automated robotic lines, German technology and standards.

PERFORMANCE GUARANTEE

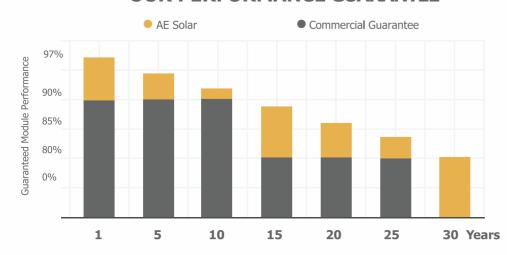
AE Solar assures high investment, security and warranty claims by providing linear performance guarantee of 30 years and 12 years of product warranty.

PLUS-SORTING

Higher yield due to plus-sorting from 0 up to +5 Wp guarantees the high system efficiency and yield stability.

CERTIFICATES

Lining with international standards, AE Solar Photovoltaic modules are tested and certified under extreme stress conditions and it can bear harsh environment influences.











AE P6-36 Series 155W-175W

SPECIFICATIONS						
31		AE155P6-36	AE160P6-36	AE165P6-36	AE170P6-36	AE175P6-36
Nominal Max. Power	Pmax (Wp)	155	160	165	170	175
Maximum power voltage	Vmp(V)	17.90	18.32	18.73	19.15	19.56
Maximum power current	Imp (A)	8.66	8.73	8.81	8.88	8.95
Open-circuit voltage	Voc(V)	22.69	22.90	23.10	23.31	23.52
Short-circuit current	Isc (A)	9.27	9.31	9.35	9.42	9.48
Module efficiency	(%)	15.63	16.14	16.64	17.14	17.65
Power tolerance	Pmax (Wp)			0 / + 4.99		
Maximum system voltage DC	(V)			1000		
Maximum series fuse rating	(A)			15		
Operating temperature	(°C)			-40 to +85		
Temp. coefficients of Pmax	(%/°C)			-0.40		
Temp. coefficients of Voc	(%/°C)			-0.31		
Temp. coefficients of Isc	(%/°C)			0.053		
Nom. Operating cell temp.(NOCT)	(°C)			45±2		

The electrical data apply to standard test conditions (STC): Irradiance of 1000 W/m² with spectrum AM 1.5 and a cell temperature of 25°C.

MATERIAL CHARACTERISTICS

Cell type Mono-crystalline 156.75mm × 156.75mm

No. of cells 36 (4 x 9)

Dimensions 1480 x 670 x 35 mm

Weight 10.8 kg
Junction box IP 67 rated

Output cable 1 x 4.0mm², 900mm length or customised

Connector type MC 4 / MC 4 compatible Hail resistance Max. \varnothing 28 mm, at 23 m/s

Wind load 2400 Pa / 244 kg/m² Mechanical load 5400 Pa / 550 kg/m²

CERTIFICATES







PID RESISTANT SALT MIST RESISTANT SAND RESISTANT CORROSIVE GAS (NH3)











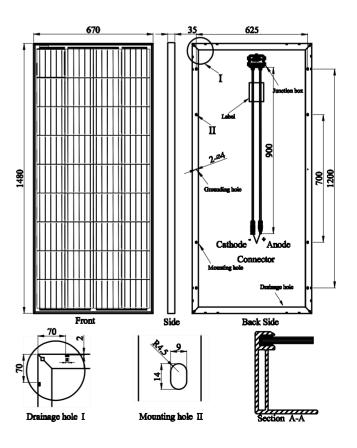
FOR INNOVATIVE SHADING RESISTANT MODULES DEVELOPMENT

AES-DSH2019 V.002
All rights reserved. Specifications included in this data sheet are subject to change without notice.

PACKAGING INFORMATION

Packing configuration 90 pcs / double pallet
Loading Capacity 1350 pcs / 40HQ
Size / pallet (mm) 1510 x 1135 x 2370
Weight 1107 kg / double pallet

DIMENSIONS







AE POWERPLUS

POLYCRYSTALLINE PV MODULES AE P6-60 Series 265W-290W



CELLS





RESISTANT



SALT CORROSION RESISTANT



SAND RESISTANT NH,

AMMONIA RESISTANT



HIGHLY STABLE AND TOUGH

GERMAN QUALITY

AE Solar photovoltaic modules are produced using high quality materials, automated robotic lines, German technology and standards.

PERFORMANCE GUARANTEE

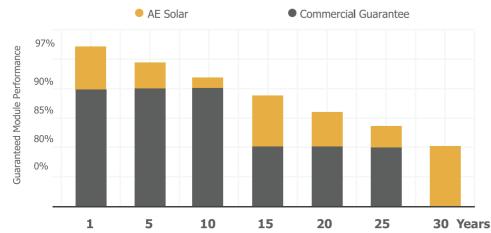
AE Solar assures high investment, security and warranty claims by providing linear performance guarantee of 30 years and 12 years of product warranty.

PLUS-SORTING

Higher yield due to plus-sorting from 0 up to +5 Wp guarantees the high system efficiency and yield stability.

CERTIFICATES

Lining with international standards, AE Solar Photovoltaic modules are tested and certified under extreme stress conditions and it can bear harsh environment influences.











AE P6-60 Series 265W-290W

SPECIFICATIONS		AE265P6-60	AE270P6-60	AE275P6-60	AE280P6-60	AE285P6-60	AE290P6-60			
Nominal Max. Power	Pmax (Wp)	265	270	275	280	285	290			
Maximum power voltage	Vmp(V)	30.41	30.82	31.24	31.65	32.07	32.48			
Maximum power current	Imp (A)	8.71	8.76	8.80	8.85	8.89	8.93			
Open-circuit voltage	Voc(V)	38.10	38.31	38.52	38.72	38.93	39.14			
Short-circuit current	Isc (A)	9.26	9.31	9.35	9.38	9.44	9.47			
Module efficiency	(%)	16.19	16.50	16.80	17.11	17.41	17.72			
Power tolerance	Pmax (Wp)		0 / + 5							
Maximum system voltage DC	(V)	1000								
Operating temperature	(°C)	-40 to +85								
Temp. coefficients of Pmax	(%/°C)		-0.40							
Temp. coefficients of Voc	(%/°C)		-0.31							
Temp. coefficients of Isc	(%/°C)		0.053							
Nom. Operating cell temp.(NOCT)	(°C)	45±2								

The electrical data apply to standard test conditions (STC): Irradiance of 1000 W/m² with spectrum AM 1.5 and a cell temperature of 25°C.

MATERIAL CHARACTERISTICS

Cell type Poly-crystalline 156.75mm × 156.75mm

No. of cells 60 (6 x 10)

Dimensions 1650 x 992 x 35mm

Weight 17,5 kg

Junction box IP 67 MC 4 compatible

Output cable 1 x 4.0mm², 900mm length or customised

Connector type MC 4 compatible

Hail resistance Max. Ø 28 mm, at 23 m/s

Wind load 2400 Pa / 244 kg/m²

Mechanical load 5400 Pa / 550 kg/m²

CERTIFICATES







PID RESISTANT SALT MIST RESISTANT SAND RESISTANT CORROSIVE GAS (NH3)









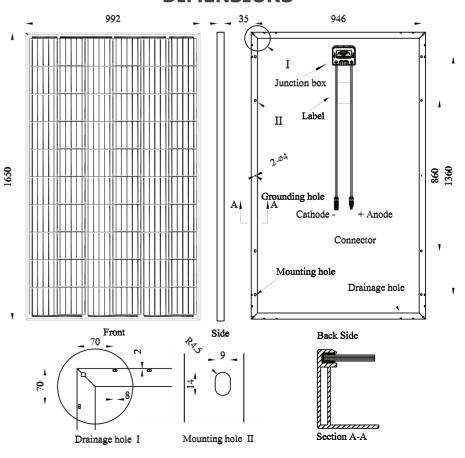
AES-DSH2019 V.002 All rights reserved. Specifications included in this data sheet are subject to change without notice.

PACKAGING INFORMATION

Packing configuration 64
Loading Capacity 89
Size / pallet (mm) 16
Weight 12

64 pcs/double pallet 896 pcs / 40HQ 1685 X 1135 X 2390 1220 kg / double pallet

DIMENSIONS



Iel.: +49 8231 92 92 52 2 Fax: +49 8231 97 82 68 9 Email: sales@ae-solar.com Web: www.ae-solar.com





AE POWERPLUS

POLYCRYSTALLINE PV MODULES AE P6-72 Series 315W-345W



CELLS





RESISTANT





SAND RESISTANT

AMMONIA RESISTANT



HIGHLY STABLE AND TOUGH

GERMAN QUALITY

AE Solar photovoltaic modules are produced using high quality materials, automated robotic lines, German technology and standards.

PERFORMANCE GUARANTEE

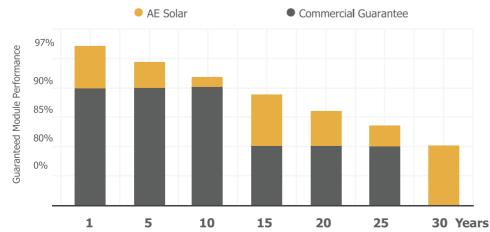
AE Solar assures high investment, security and warranty claims by providing linear performance guarantee of 30 years and 12 years of product warranty.

PLUS-SORTING

Higher yield due to plus-sorting from 0 up to +5 Wp guarantees the high system efficiency and yield stability.

CERTIFICATES

Lining with international standards, AE Solar Photovoltaic modules are tested and certified under extreme stress conditions and it can bear harsh environment influences.











AE P6-72 Series 315W-345W

SPECIFICATIONS								
		AE315P6-72	AE320P6-72	AE325P6-72	AE330P6-72	AE335P6-72	AE340P6-72	AE345P6-72
Nominal Max. Power	Pmax (Wp)	315	320	325	330	335	340	345
Maximum power voltage	Vmp(V)	36.66	36.75	36.83	36.97	37.05	37.09	37.18
Maximum power current	Imp (A)	8.59	8.71	8.82	8.93	9.04	9.17	9.28
Open-circuit voltage	Voc(V)	45.59	45.72	45.83	45.89	45.93	45.97	46.01
Short-circuit current	Isc (A)	9.24	9.28	9.33	9.37	9.41	9.44	9.48
Module efficiency	(%)	16.23	16.49	16.75	17.01	17.26	17.52	17.78
Power tolerance	Pmax (Wp)				0 / + 5			
Maximum system voltage DC	(V)				1000			
Operating temperature	(°C)				-40 to +85			
Temp. coefficients of Pmax	(%/°C)				-0.40			
Temp. coefficients of Voc	(%/°C)				-0.31			
Temp. coefficients of Isc	(%/°C)				0.053			
Nom. Operating cell temp.(NOCT)	(°C)				45±2			

The electrical data apply to standard test conditions (STC): Irradiance of 1000 W/m² with spectrum AM 1.5 and a cell temperature of 25°C.

MATERIAL CHARACTERISTICS

Cell type Poly-crystalline 156.75mm x 156.75mm

No. of cells 72 (6 x 12)

Dimensions 1956 x 992 x 35 mm

Weight 20 kg

Junction box IP 67 MC 4 compatible

1 x 4.0mm², 1200mm length or customised Output cable

Connector type MC 4 compatible

Hail resistance Max. Ø 28 mm, at 23 m/s

Wind load 2400 Pa / 244 kg/m² 5400 Pa / 550 kg/m² Mechanical load

CERTIFICATES







SALT MIST RESISTANT SAND RESISTANT CORROSIVE GAS (NH3)









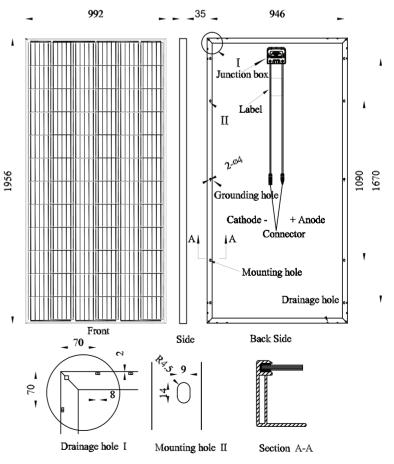
AES-DSH2019 V.002 All rights reserved. Specifications included in this data sheet are subject to change without notice.

PACKAGING INFORMATION

Packing configuration Loading Capacity Size / pallet (mm) Weight

64 pcs/double pallet 768 pcs / 40HQ 1985 x 1120 x 2390 1395 kg /double pallet

DIMENSIONS





AE THUNDER MODULE





















AE HM6-60 Series 380W-400W

SPECIFICATIONS		AE380HM6-60	AE385HM6-60	AE390HM6-60	AE395HM6-60	AE400HM6-60
		AE300HIVIO-00	AE303HW0-00	AE390HIVIO-00	AE393HIVIO-00	AE400HW0-00
Nominal Max. Power	Pmax (Wp)	380	385	390	395	400
Maximum power voltage	Vmp(V)	40.6	40.8	40.8	40.9	41.0
Maximum power current	Imp (A)	9.39	9.44	9.56	9.66	9.76
Open-circuit voltage	Voc(V)	49.1	49.3	49.3	49.4	49.6
Short-circuit current	Isc (A)	9.93		10.63	10.07	10.12
Module effciency	(%)	20.3	20.5	20.8	21.1	21.3
Power tolerance	Pmax (Wp)	$\dot{\sim}$		0/+4.99		
Maximum system voltage DC	VDC(IEC)			1500		
Operating temperature	(°C)	\$		-40 to +85		
Temp. coeffcients of Pmax	(%/°C)			-0.34		
Temp. coeffcients of Voc	(%/°C)	\mathcal{A}^{-}		-0.27	—	}
Temp. coeffcients of Isc	(%/°C)			0.04		
Nom. Operating cell temp.(NOCT)	(°C)	35		42.3±2		1

The electrical data apply to standard test conditions (STC): Irradiance of 1000 W/m2 with spectrum AM 1.5 and a cell temperature of 25°C.

MATERIAL CHARACTERISTICS

PERC Mono-crystalline 158.75 x 158.75mm Cell type

1646 X 1140 X 35 mm **Dimensions**

20.5 kg Weight

IP67: TUV&UL Junction box

1 x 4.0mm²/1000mm Output cable MC4 / MC4 compatible Connector type

Hail resistance Diameter of 1m. Ø 25 mm, at 23 m/s

Wind load 2400 PA / 244 kg/m² 5400 Pa / 550 kg/m² Mechanical load

CERTIFICATES





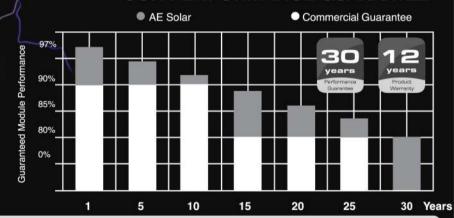




PACKAGING INFORMATION

Packing configuration 62pcs / double pallet **Loading Capacity** 868pcs / 40HQ Size / pallet (mm) 1685 x 1135 x 2490 Weight 1370 kg / double pallet

OUR PERFORMANCE GUARANTEE



The solar industry is advancing at a rapid pace. Solar equipment continues TO BECOME MORE POWERFUL AND MORE RESILIENT WHILE BECOMING LESS EXPENSIVE. Thunder is the most efficient next-generation solar panels series created by AE Solar. A WINNING COMBINATION OF HIGHEST-WATTAGE AND MODERN AESTHETIC GUARANTEES TO MAXIMIZE YOUR BENEFIT FROM A SOLAR INVESTMENT.

THUNDER IS MORE POWER, THUNDER IS MORE SAVINGS.











AE SOLAR Messerschmittring 86343 Konigsbrunn Germany

AES-DSH2019 V.002 stions included in this data sheet are subject to



AE ECLIPSE SOLAR MODULES



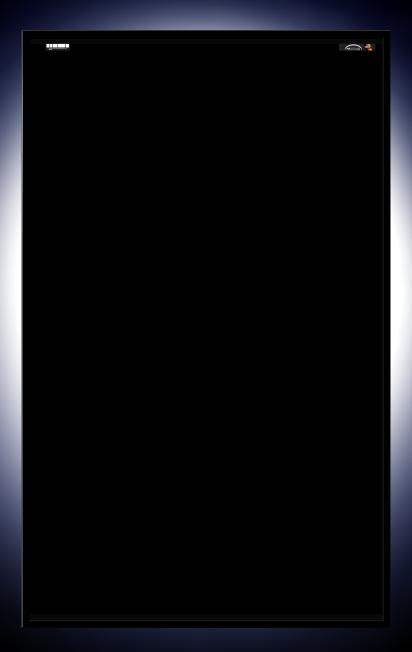








AE HM6L-60







AE HM6L-60 Series 345W-350W

SPECIFICATIONS

		AE345HM6L-60		AE350HM6L-60	
Nominal Max. Power Pm	nax (Wp)	345		350	
	/mp(V)	34.95		35.21	
Maximum power current I	mp (A)	9.87		9.94	
Open-circuit voltage	Voc (V)	42.23		42.52	
Short-circuit current	Isc (A)	10.38		10.46	
Module efficiency	(%)	20.45		20.74	
Power tolerance Pm	nax (Wp)		0 / + 5		
Maximum system voltage DC	(V)		1500		
Maximum series fuse rating	(A)		15		
Operating temperature	(°C)		-40 to +85		
Temp. coefficients of Pmax ((%/°C)		-0.34		
Temp. coefficients of Voc	(%/°C)		-0.27		
Temp. coefficients of Isc (%/°C)		0.035		
Nom. Operating cell temp.(NOCT)	(°C)		44±2		

The electrical data apply to standard test conditions (STC): Irradiance of 1000 W/m² with spectrum AM 1.5 and a cell temperature of 25°C.

MATERIAL CHARACTERISTICS

Cell type Mono-crystalline 158.75 x 79.38

No. of cells 60 (6 x 10)

1692 X 996 X 35 **Dimensions**

Weight 18.5 kg

Junction box IP 68 rated

1 x 4.0mm², 350 mm length or customised Output cable

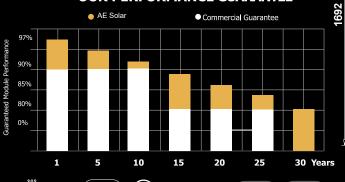
MC 4 / MC 4 compatible Connector type

Hail resistance Max. Ø 28 mm, at 23 m/s

Wind load 2400 Pa / 244 kg/m²

5400 Pa / 550 kg/m² Mechanical load

OUR PERFORMANCE GUARANTEE



30

ed. Specifications included in this data sheet are subject to

PACKAGING INFORMATION

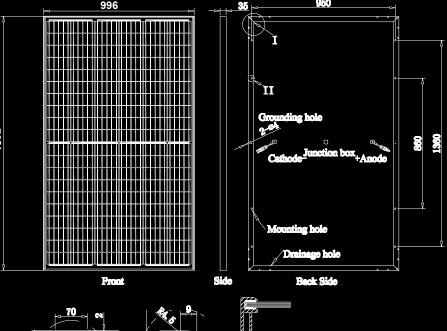
Packing configuration 64 pcs / double pallet

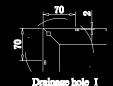
Loading Capacity 832 pcs / 40HQ

Size / pallet (mm) 1720 x 1135 x 2395

1335 kg / double pallet Weight

DIMENSIONS



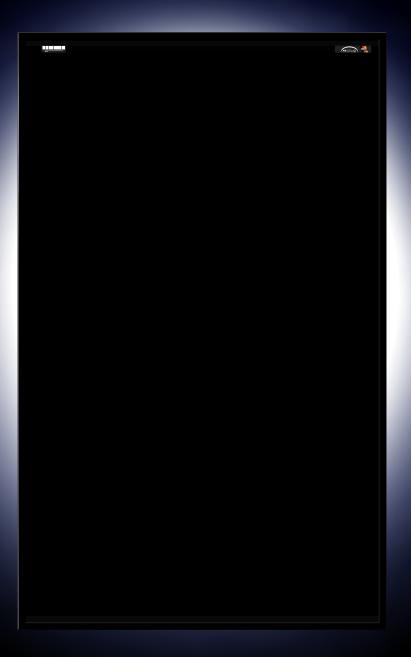








AE HM6-60







AE HM6-60 Series 305W-335W

SPECIFICATIONS								
00		AE305HM6-60	AE310HM6-60	AE315M6-60	AE320HM6-60	AE325HM6-60	AE330HM6-60	AE335HM6-60
Nominal Max. Power	Pmax (Wp)	305	310	315	320	325	330	335
Maximum power voltage	Vmp(V)	32.80	33.00	33.20	33.40	33.61	34.81	34.02
Maximum power current	Imp (A)	9.30	9.40	9.49	9.59	9.68	9.76	9.85
Open-circuit voltage	Voc (V)	40.31	40.50	40.70	40.90	41.10	41.31	41.89
Short-circuit current	Isc (A)	9.83	9.92	10.04	10.15	10.20	10.37	10.49
Module efficiency	(%)	18.39	18.69	18.99	19.30	19.60	19.90	20.20
Power tolerance	Pmax (Wp)				0 / + 5			
Maximum system voltage DC	(V)				1500			
Maximum series fuse rating	(A)				15			
Operating temperature	(°C)				-40 to +85			
Temp. coefficients of Pmax	(%/°C)				-0.34			
Temp. coefficients of Voc	(%/°C)				-0.27			
Temp. coefficients of Isc	(%/°C)				0.035			
Nom. Operating cell temp.(NOC	T) (°C)				44±2			

The electrical data apply to standard test conditions (STC): Irradiance of 1000 W/m² with spectrum AM 1.5 and a cell temperature of 25°C.

MATERIAL CHARACTERISTICS

Cell type Mono-crystalline 158.75 x 158.75mm

No. of cells 60 (6 x 10)

Dimensions 1665 X 996 X 35

Weight 18.5 kg

Junction box IP 68 rated

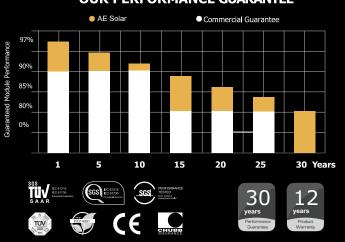
Output cable 1 x 4.0mm², 900mm length or customised

Connector type MC 4 / MC 4 compatible

Hail resistance Max. Ø 28 mm, at 23 m/s

Wind load 2400 Pa / 244 kg/m² <u>Mechanical load</u> 5400 Pa / 550 kg/m²

OUR PERFORMANCE GUARANTEE



AES-DSH2019 V.002 All rights reserved. Specifications included in thi s data sheet are subject to change without notice.

PACKAGING INFORMATION

Packing configuration 64 pcs / double pallet

Loading Capacity

896 pcs / 40HQ

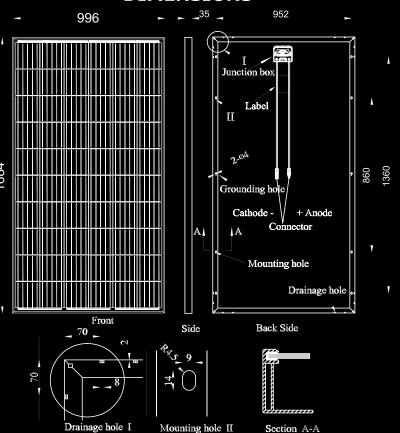
Size / pallet (mm)

1695 x 1135 x 2395

Weight

1283 kg / double pallet

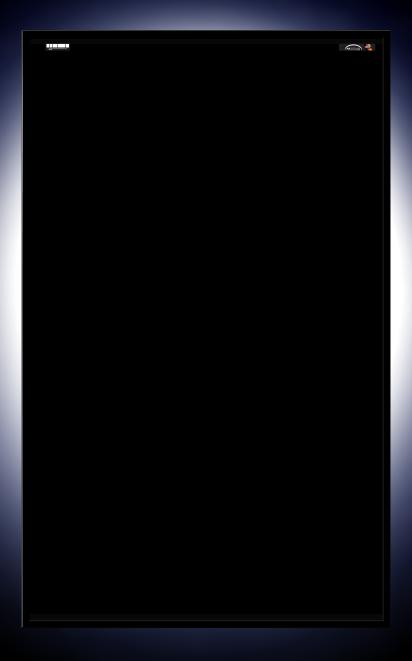
DIMENSIONS



86343 Konigsbrunn Germany



AE HM6-60







AE HM6-60 Series 380W - 400W

SPECIFICATIONS

AE380HM6-60	AF385HM6-60	AF390HM6-60	AE305HM6-60	AE400HM6-60
MEGOGI IIIIO-OO		WEGGG INDO-GG		

Nominal Max. Power	Pmax (Wp)	380	385	390	395	400	
Maximum power voltage	Vmp(V)	40.6	40.8	40.8	40.9	41.0	
Maximum power current	Imp (A)	9.36	9.44	9.56	9.66	9.76	
Open-circuit voltage	Voc (V)	49.1	49.3	49.3	49.4	49.6	
Short-circuit current	Isc (A)	9.36	9.44	9.56	9.66	9.76	
Module efficiency	(%)	20.3	20.5	20.8	21.1	21.3	
Power tolerance	Pmax (Wp)			0 / + 5			
Maximum system voltage DC	(V)			1500			
Maximum series fuse rating	(A)			20			
Operating temperature	(°C)			-40 to +85			
Temp. coefficients of Pmax	(%/°C)			-0.34			
Temp. coefficients of Voc	(%/°C)			-0.27			
Temp. coefficients of Isc	(%/°C)			0.04			
Nom. Operating cell temp.(NOCT	r) (°C)			44±2			

The electrical data apply to standard test conditions (STC): Irradiance of 1000 W/m² with spectrum AM 1.5 and a cell temperature of 25°C.

MATERIAL CHARACTERISTICS

Cell type Mono-crystalline 158.75 x 158.75mm

No. of cells 60 (6 x 10)

Dimensions 1646 X 1140 X 35

Weight 20.5 kg

Junction box IP 67 rated

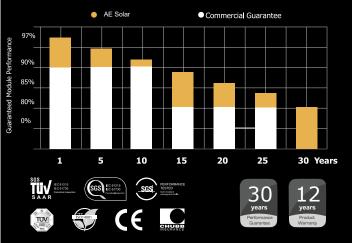
Output cable 1 x 4.0mm²,1000mm length or customised

Connector type MC 4 / MC 4 compatible

Hail resistance Max. Ø 28 mm, at 23 m/s

Wind load 2400 Pa / 244 kg/m² Mechanical load 5400 Pa / 550 kg/m²

OUR PERFORMANCE GUARANTEE



หลรายสายของเบอ All rights reserved. Specifications included in this data sheet are subject to change without notice.

PACKAGING INFORMATION

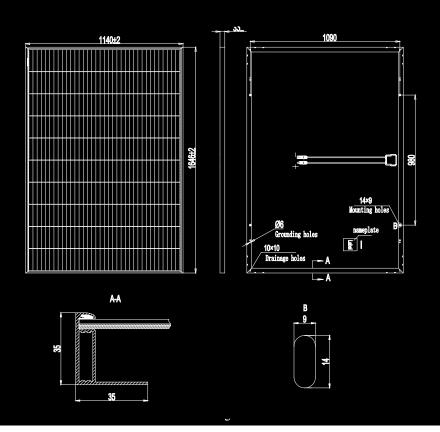
Packing configuration 64 pcs / double pallet

Loading Capacity 868 pcs / 40HQ

Size / pallet (mm) 1695 x 1135 x 2400

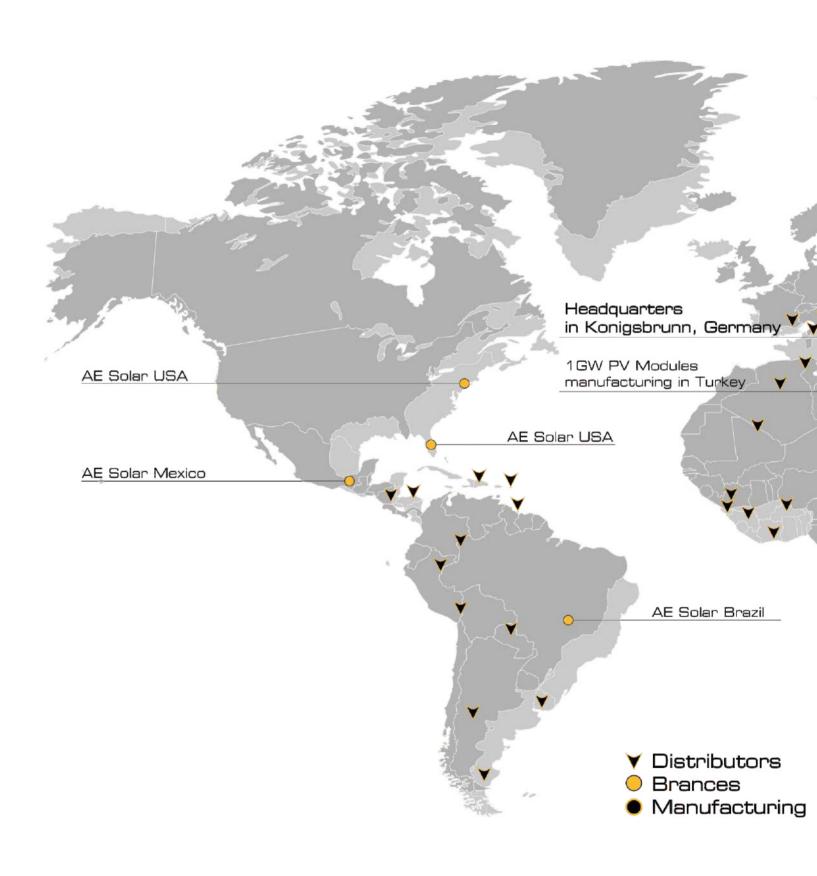
Weight 1283 kg / double pallet

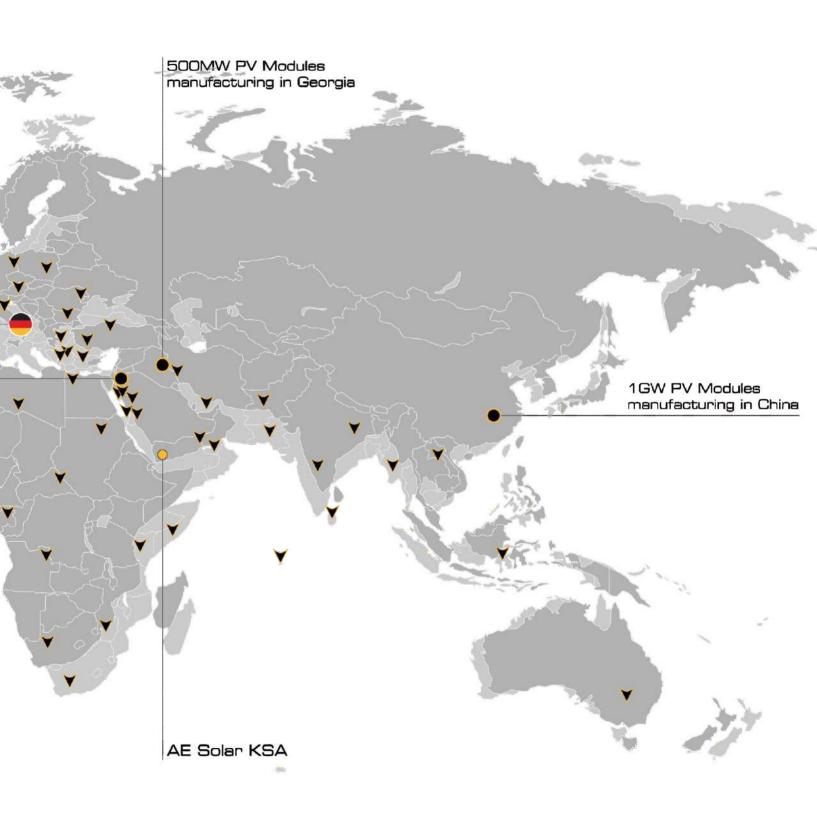
DIMENSIONS





AE SOLAR ON MAP







AE Solar GmbH

Messerschmittring 54 D-86343 Königsbrunn, Germany

Tel.: +49 8231 92 92 522 E-mail: sales@ae-solar.com

Inspiring green energy since 2003



2021

Forefront of providing Solar Tech solutions and transforming businesses



2020

Top design 2020



2019

Inter Solar 2019 Photovoltaics award finalist.



2018

PV magazine 2018 Top innovationaward.



2017

SNEC 2017 PV Power Expo Top 10 Highlights award.



