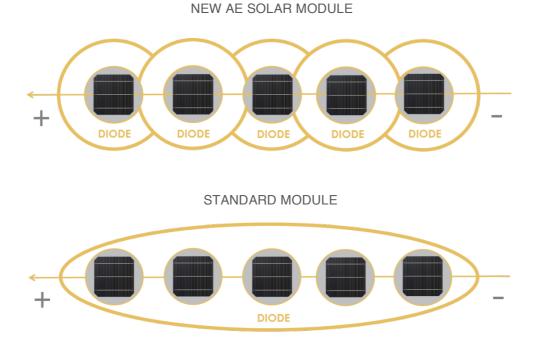


# AE Smart Module Core - Technology



AE Smart Module technology protects each cell by an individual bypass diode. When the current of a single cell does not match the current of the whole string, that cell has a reverse voltage, when measured more than 0.6V, it will automatically activate the bypass diode. As a result, the rest of the cells will not be affected by the disruption. The heated cell will consume less energy generated by the unaffected cells, and produce less heat. Meanwhile, only the heated cell will be bypassed, and the rest of good cells will continue to generate power.



### 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.



### 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.



## RELIABILITY

The lower temperature of hot-spot free modules will eliminate potential cause for back sheet degradation, hence enhancing reliability for longer term.

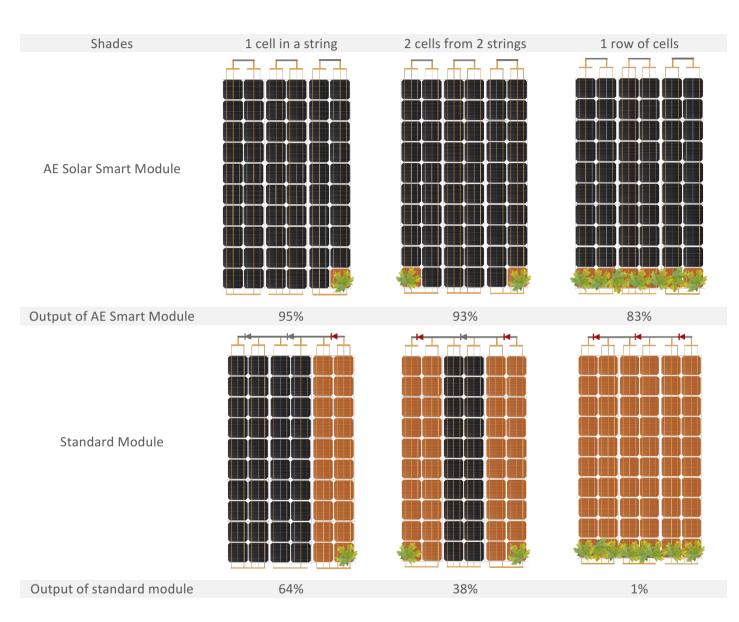


## SAFETY

Instantly reduced temperature, thus eliminating material hazard and ensuring more safety of the module.







When multiple cells are in shade, a hot-spot free module can generate up to 80% more power, compared to a standard module.

It prevents the sharp falls in module output caused by hot spots or module shading, also with the smart optimizer, reducing current and voltage mismatch to significantly increase in overall return for both rooftop and ground mounted installations.

Drastic reduced temperature on hot-spot cells from 160°C to 85°C henceforth eliminates the potential hazards such fire and material degradation and ensures better safety, long life and high returns.

# **AE SMART HOT-SPOT FREE MODULE** AE SMM6-72 Series 320W-350W





Up to 30% more power output compared to standard PV modules Space saving for PV plants by using of Smart-Modules compared to standard PV modules The temperature of Smart-Module cells is not higher than the operating temperature of PV modules No reduction of PV modules stability and no fire risk, which is caused by hot spots



## **GERMAN QUALITY**

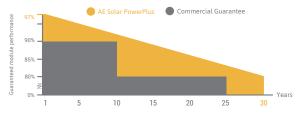
AE Solar photovoltaic modules are manufactured using high-quality materials, automated machine, German Technology and Standards



# PERFORMANCE GUARANTEE

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







# PLUS-SORTING

Higher yield due to plus-sorting of 0 to +4.99 Wp quarantees the high system efficiency and yield stability



# CERTIFICATES

Lining with International Standards, AE Solar Photovoltaic modules are tested and certified under extreme stress and it can bear harsh environmental influences



SGS



PID RESISTANT

SAND RESISTANT CORROSIVE GAS (NH3)









EC CE



# TECHNICAL DATA AE SMM6-72 Series 320W-350W

ELECTRICAL DATA		AE320SM M6-72	AE325SM M6-72	AE330SM M6-72	AE335SM M6-72	AE340SM M6-72	AE345SM M6-72	AE350SM M6-72
Nominalpower	Pm (Wp)	320	325	330	335	340	345	350
Opencircuitvoltage	Voc (V)	46.43	46.62	46.74	46.84	46.94	47.08	47.23
Short-circuit current	Isc(A)	9.26	9.34	9.38	9.43	9.48	9.51	9.55
Voltage at max power	Vmp(V)	38.27	38.54	38.72	38.85	39.09	39.34	39.46
Current at max power	Imp (A)	8.36	8.43	8.52	8.62	8.70	8.77	8.87
Module Efficiency	(%)	16.13	16.38	16.63	16.86	17.14	17.39	17.64
System Voltage	(V)				1000			
Temp. coefficient Voc	(%/°C)				-0.33			
Temp. coefficient lsc	(%/°C)				0.059			
Temp.coefficient Pm	(%/°C)				-0.41			
Operating temp.	(°C)				-40 to +85			
NOCT	(°C)				45±2			

The electrical data apply to standard test conditions (STC): Irradiance of 1000 W/m<sup>2</sup> with spectrum AM 1.5 and a cell temperature of 25°C.

# TECHNICAL DATA

Junction box	IP 67
Wire cross section (Ø, mm <sup>2</sup> )	4.0 / AWG 12
Cable length (mm)	900 or 1100
Connector type	MC 4 / MC 4 compatible
Dimensions (L x W x H, mm)	2000 x 992 x 40
Weight (kg)	24
Specification (mm)	Mono 156 / 6 x 12
Hail resistance	Max. Ø 28 mm, at 23 m/s
Wind load	2400Pa / 244kg / m²
Mechanical load	5400Pa / 550kg / m²

## PACKAGING INFORMATION

Packing configuration	54pcs / pallet
Loading Capacity	594pcs / 40HQ
Size / pallet (mm)	2040 x 1120 x 2335
Weight	1410kg / pallet

## SCALE

