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# **EnergyPal**

## **Solar Panel Guide Specification Data Sheet**

**AE Solar  
AE HDT 60G-DG 305W-315W  
HDT-60G-305**

Also available on the web at  
[EnergyPal.com/ae-solar-solar-panels/hdt-60g-305](http://EnergyPal.com/ae-solar-solar-panels/hdt-60g-305)



# AE HDT PV MODULES

## MONOCRYSTALLINE PV MODULES

### WITH TRANSPARENT BACKSHEET

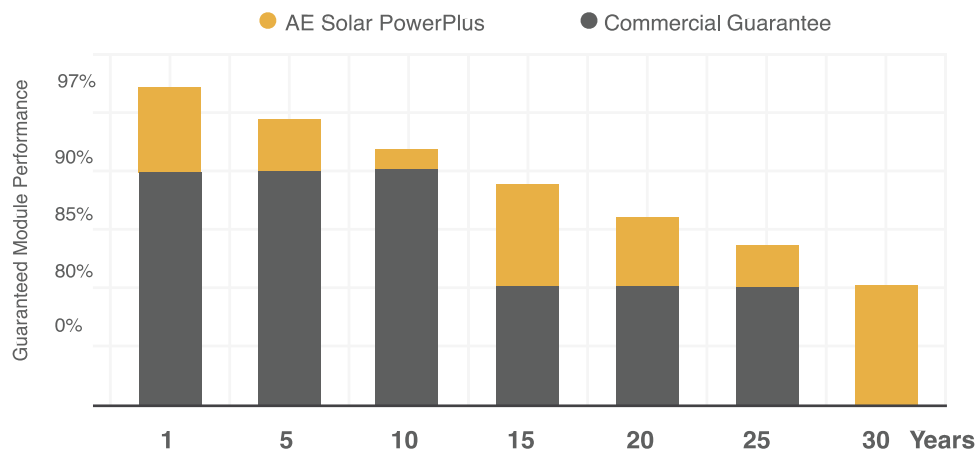
#### AE HDT6-60 Series 305W-315W

<b>60 CELLS</b>	 <b>PID RESISTANT</b>	 <b>SALT CORROSION RESISTANT</b>	 <b>SAND RESISTANT</b>	$\frac{NH_3}{S}$ <b>AMMONIA RESISTANT</b>	 <b>HIGHLY STABLE AND TOUGH</b>
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- TEMPERATURE**  
 The Advantage of HDT Photovoltaic module is Power-Temperature coefficient decreases by 40% than standard type of silicon solar modules. Therefore, it has much higher power output in high temperature environment.
- EFFICIENCY**  
 HDT Photovoltaic module's conversional efficiency is increased by 10%-20% compared to standard solar modules. Moreover, reducing the cost of accessoires, transportation, installation and maintenance.
- 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.

- HIGH RETURNS**  
 This new technology of HDT has much lower LCOE and it provides increase of the performance ratio and much higher return of investment.
- HIGH STABILITY**  
 Based on new technology, HDT photovoltaic modules can decrease Light Induced Degradation by 50% compared to standard Solar modules.
- CERTIFICATES**  
 Lining with international standards, AE Solar Photovoltaic modules are tested and certified under extreme stress conditions and it can bear harsh environment influences.

### OUR PERFORMANCE GUARANTEE



**30**  
years  
Performance Guarantee

**12**  
years  
Product Warranty



Deutsche  
Qualität  
Garantiert

# TECHNICAL DATA

## HDT Solar Module with transparent backsheet

### SPECIFICATION

		HDT-60G-305		HDT-60G-310		HDT-60G-315	
		Pmax (Wp)		310		315	
		Front Side	Back Side	Front Side	Back Side	Front Side	Back Side
Nominal Max. Power	Pmax (Wp)	305		310		315	
Maximum power voltage	Vmp(V)	36.0	35.8	36.3	36.0	36.6	36.1
Maximum power current	Imp (A)	8.48	6.98	8.54	7.08	8.61	7.15
Open-circuit voltage	Voc(V)	43.6	43.3	43.8	43.5	44.0	43.7
Short-circuit current	Isc (A)	9.13	7.40	9.17	7.40	9.21	7.40
Module efficiency	(%)	18.54	15.20	18.85	15.48	19.15	15.70
Power tolerance	Pmax (Wp)	0 / + 5					
Maximum system voltage DC	V (IEC)	1500					
Operating temperature	(°C)	-40 to +85					
Temp. coefficients of Pmax	(%/°C)	-0.28					
Temp. coefficients of Voc	(%/°C)	-0.277					
Temp. coefficients of Isc	(%/°C)	0.059					
Nom. Operating cell temp.(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.

#### The module gain of different rear side reflectors(Take 310as an example)

Backside Reflective Rate	Voc/V	Pmax/W	Vpm/V	Imax/A	Ipm/A	Power Generation Gain
10%	335.93	43.8	36.1	9.88	9.30	8.2%
15%	348.68	43.8	36.1	10.25	9.65	12.3%
20%	361.43	43.9	36.1	10.62	10.01	16.4%

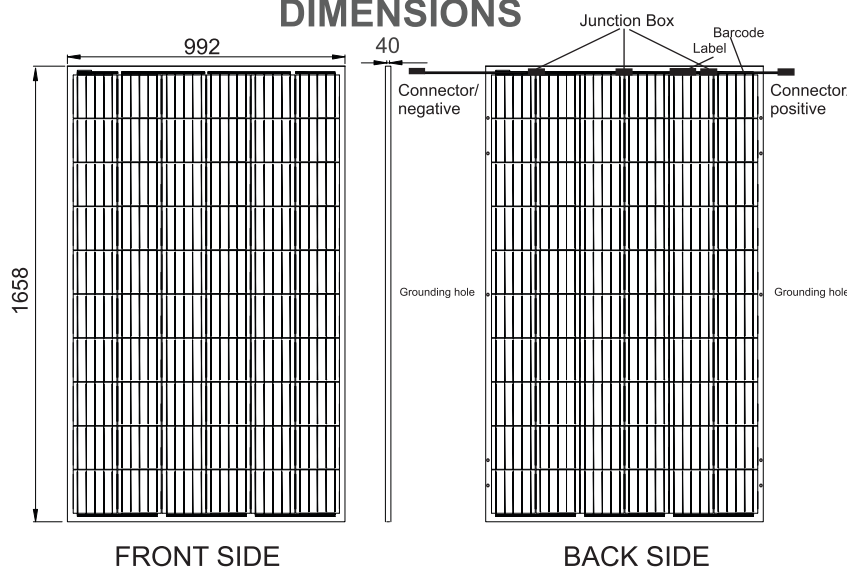
### PACKAGING INFORMATION

Packing configuration    26pcs / pallet  
 Loading capacity        728 pcs / 40HQ

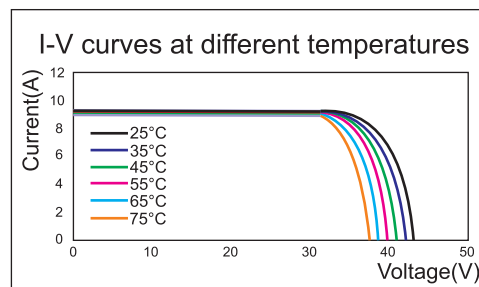
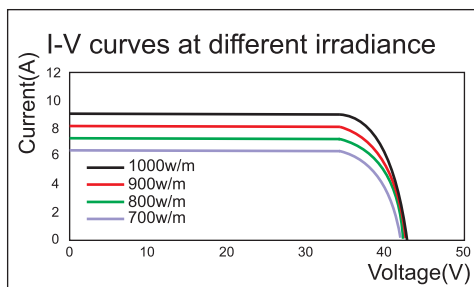
### MATERIAL CHARACTERISTICS

Cell Type	Mono-crystalline
Cell Dimension	156.75mm × 156.75mm
Dimensions	1658mm × 992mm × 40mm
Weight	19 kg
Front Glass	Embossed Tempered/ 3.2mm
Encapsulant	EVA/0.6mm
Junction Box	II /3
Cable	1000mm/4mm <sup>2</sup>
Connector	Compatibility MC4/IP67
Wind load	2400Pa / 244kg / m <sup>2</sup>
Mechanical load	5400Pa / 550kg / m <sup>2</sup>

### DIMENSIONS



### CERTIFICATES



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