ZEUS APPOLLO™

Zeus Appollo™ PV Modules Monocrystalline

ZA1 SERIES

- **High cell efficiency**
  Superior cell technology and leading manufacturing capability, high economic benefits for customers
- **Positive output tolerance**
  Guaranteed positive tolerance of up to 3% delivers higher outputs, ensuring a greater return on your investment
- **Infrared and EL tested**
  Passed Electroluminescence inspection, detecting cracks and other imperfections unseen by the naked eye
- **Bypass diodes**
  Minimize the power drop caused by shade, increase tolerance to shade and maximize output
- **Anti-reflective Glass**
  Higher module efficiency from anti-reflective, hydrophobic layer with higher light absorption and minimal surface dust
- **CEC Approved, Fire Rated and Tested & TUV European approved**
  Rigorous quality control meeting the highest international standards
- **Near Linear Performance Warranty for 25 years**
  No less than 97% of nominal output power in the first year, no more than 0.7% annual declination based on nominal output power after the second year, 25-year warranty at 80.2% of nominal output power
- **Local stock & local support**
  Quick response, service and no fuss warranty replacement

www.zeusappollo.com

Zeus Appollo Pty. Ltd
Beijing Hua Xin Liu He Investment (Australia) Pty Ltd
WA Office: Unit 6/5 Milford Street, East Victoria Park, WA 6101 Australia
Tel: +61-8-6311 9906
QLD Office: 32 Crockford Street, Banyo, QLD 4014, Australia
Tel: +61-7-3123 6148, Fax: +61-7-3266 4758
Made in China

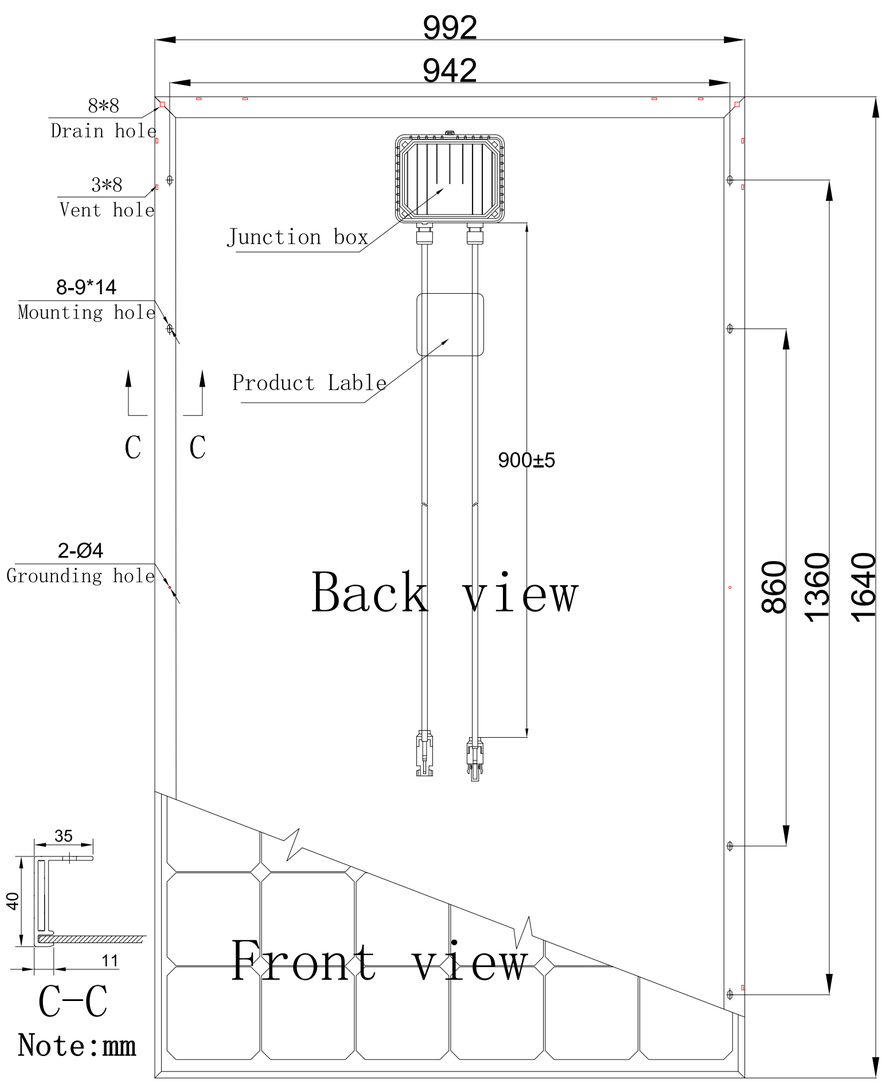
V2021.02.24

Typical electrical characteristics

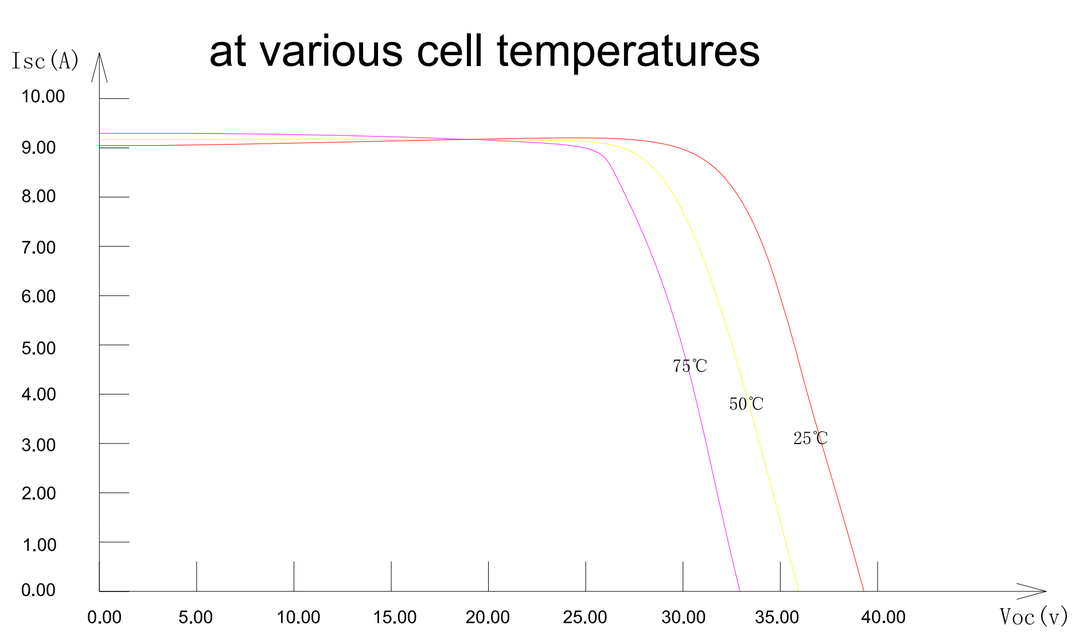
Characteristics	ZA1ZDNY-290C60	ZA1ZDNY-295C60	ZA1ZDNY-300C60
Max.Power(Pmax)	290W	295W	300W
Optimum Operating Voltage(Vm)	32.23V	32.57V	32.86V
Optimum Operating Current(Im)	9.01A	9.06A	9.13A
Open-Circuit Voltage(Voc)	39.45V	39.72V	39.98V
Short-circuit Current(Isc)	9.46A	9.50A	9.53A
Cell Efficiency	20.23%	20.58%	20.93%
Module efficiency	17.83%	18.14%	18.43%

The specifications are obtained under the Standard Test Condition (STC): 1000W/m^2 solar irradiance, AM1.5, Cell Temperature 25℃.

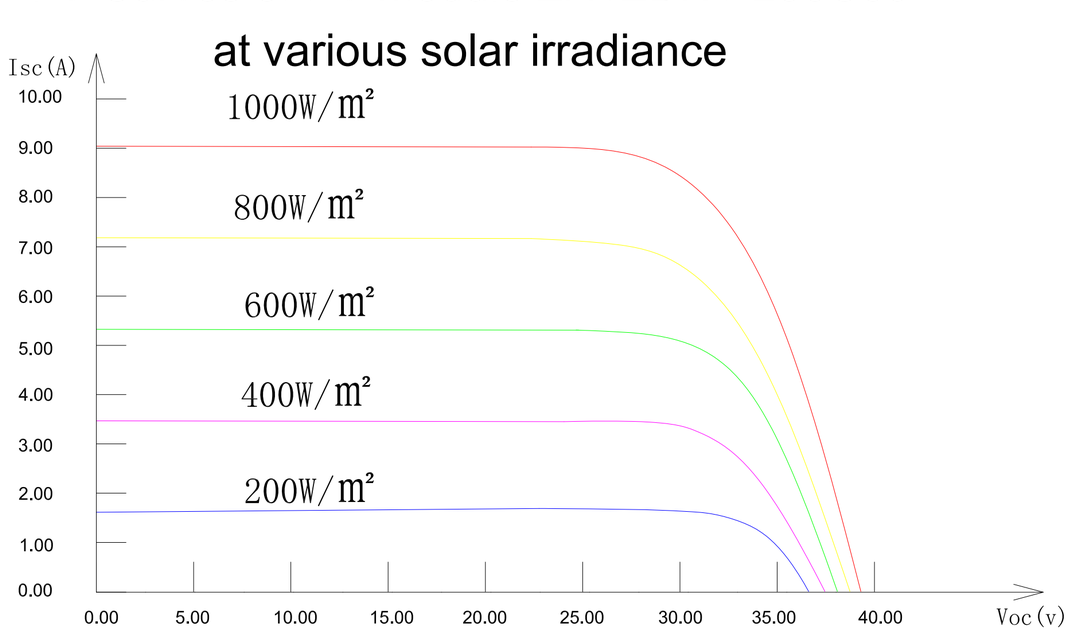
Solar Cell	Mono-crystalline 156*156mm
Measurement Tolerance(Pmax)	0 ～ +5 W
Number of cells	60 cells in series
Module Dimension	1640*992*40mm
Weight	18.20kg
Max.System Voltage	1500V DC
Max.Series Fuse Rating	15A
Cables	PV 4mm^2,90cm±5
Connectors	Ningbo Guangzhixing
	PV-GZX1500 IP67
Number of bypass diodes	3
Temperature cycling range	(-40 ～ 85 ℃)
NOCT	47℃ ±2℃
Temperature coefficients of Isc	+0.053%/K
Temperature coefficients of Voc	-0.35%/K
Temperature coefficients of Pmax	-0.40%/K
Fire safety class (UL790)	Class C
Load Capacity	342pcs/20'GP
	812pcs/40'HQ



I-V Curves of PV module ZA1ZDNY-290C60 at various cell temperatures



I-V Curves of PV module ZA1ZDNY-290C60 at various solar irradiance

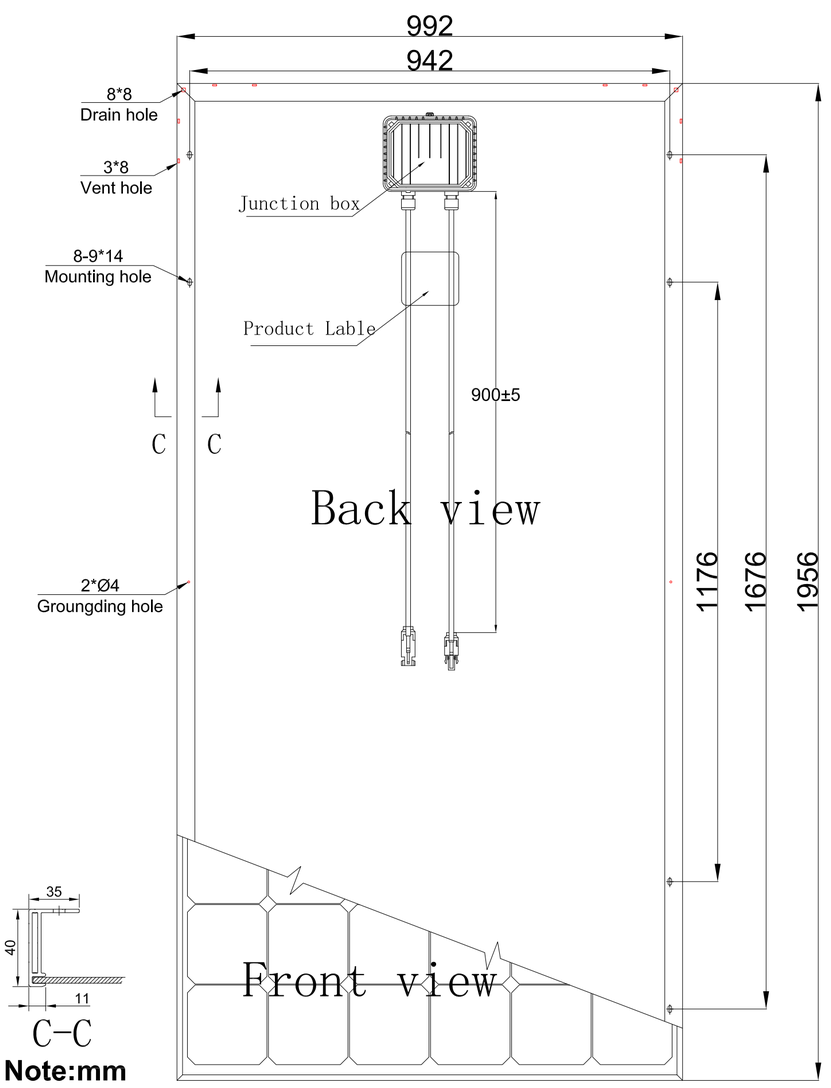


Typical electrical characteristics

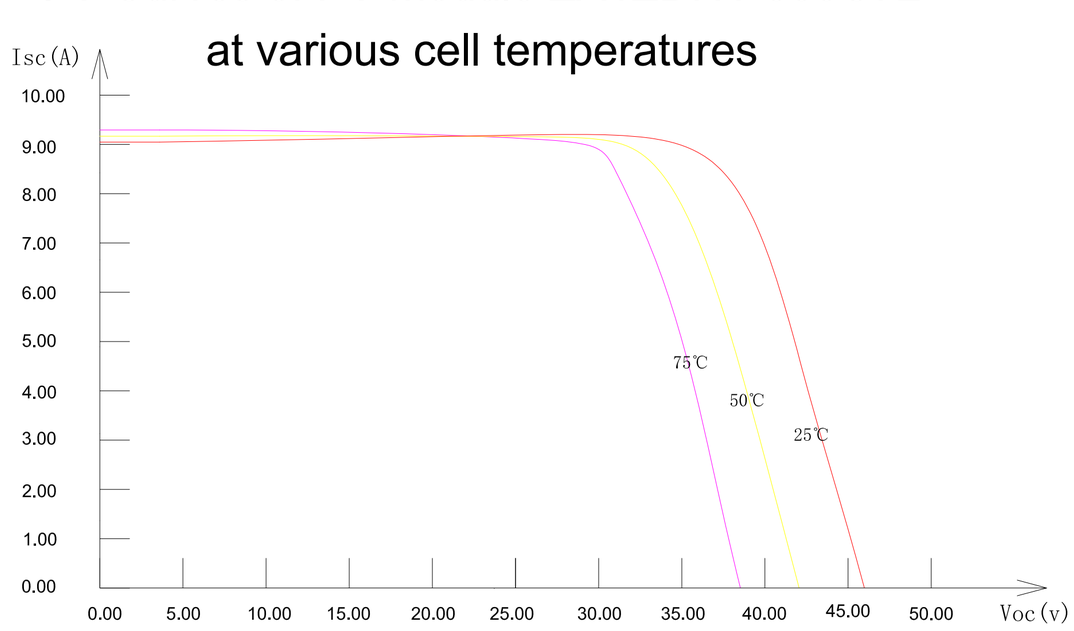
Characteristics	ZA1ZDNY-300C72	ZA1ZDNY-340C72	ZA1ZDNY-345C72	ZA1ZDNY-350C72	ZA1ZDNY-355C72
Max.Power(Pmax)	300W	340W	345W	350W	355W
Optimum Operating Voltage(Vm)	36.10V	38.02V	38.31V	38.69V	38.97V
Optimum Operating Current(Im)	8.31A	8.95A	9.01A	9.05A	9.11A
Open-Circuit Voltage(Voc)	45.02V	46.79V	46.90V	47.35V	47.59V
Short-circuit Current(Isc)	8.75A	9.37A	9.45A	9.50A	9.54A
Cell Efficiency	17.44%	19.76%	20.05%	20.34%	20.63%
Module efficiency	15.50%	17.52%	17.78%	18.04%	18.30%

The specifications are obtained under the Standard Test Condition (STC): 1000W/m^2 solar irradiance, AM1.5, Cell Temperature 25℃.

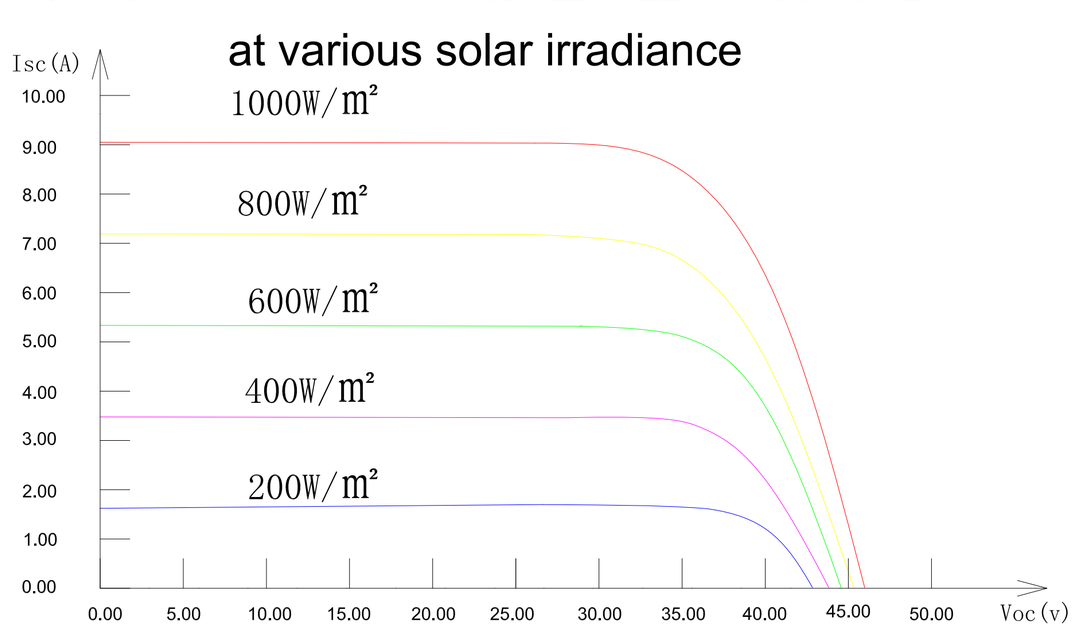
Solar Cell	Poly-crystalline 156*156mm
Measurement Tolerance(Pmax)	0 ～ +5 W
Number of cells	72 cells in series
Module Dimension	1956*992*40mm
Weight	21.50kg
Max.System Voltage	1500V DC
Max.Series Fuse Rating	15A
Cables	PV 4mm^2,90cm±5
Connectors	Ningbo Guangzhixing
	PV-GZX1500 IP67
Number of bypass diodes	3
Temperature cycling range	(-40 ～ 85 ℃)
NOCT	47℃ ±2℃
Temperature coefficients of Isc	+0.053%/K
Temperature coefficients of Voc	-0.303%/K
Temperature coefficients of Pmax	-0.40%/K
Fire safety class (UL790)	Class C
Load Capacity	290pcs/20'GP
	668pcs/40'HQ



I-V Curves of PV module ZA1ZDNY-300C72 at various cell temperatures



I-V Curves of PV module ZA1ZDNY-300C72 at various solar irradiance



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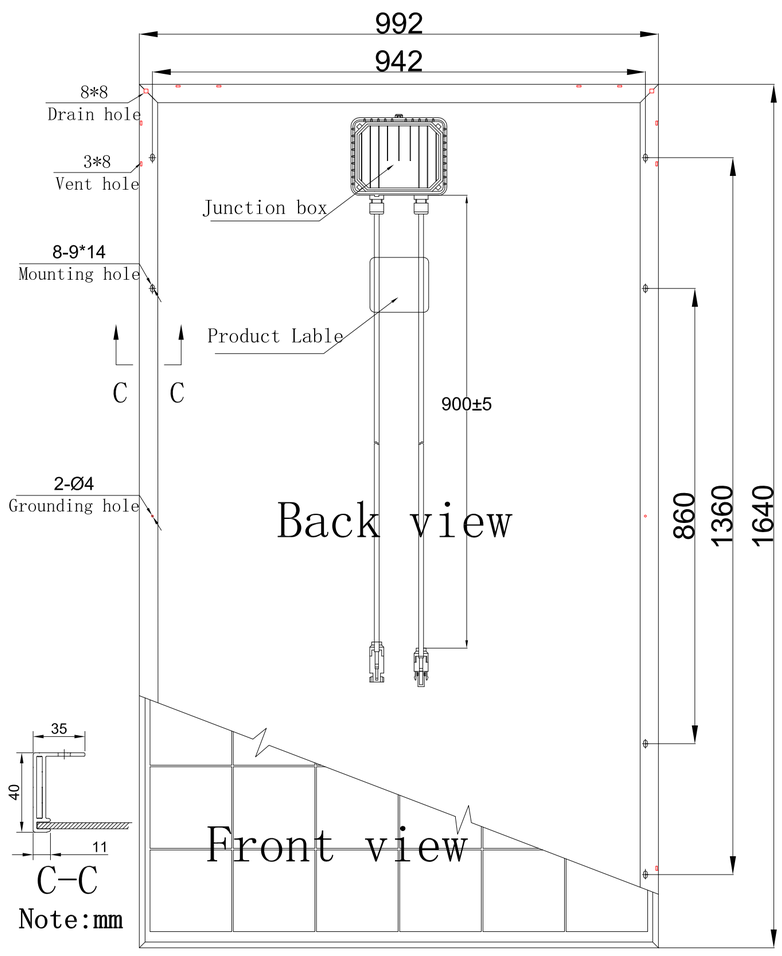
Typical electrical characteristics

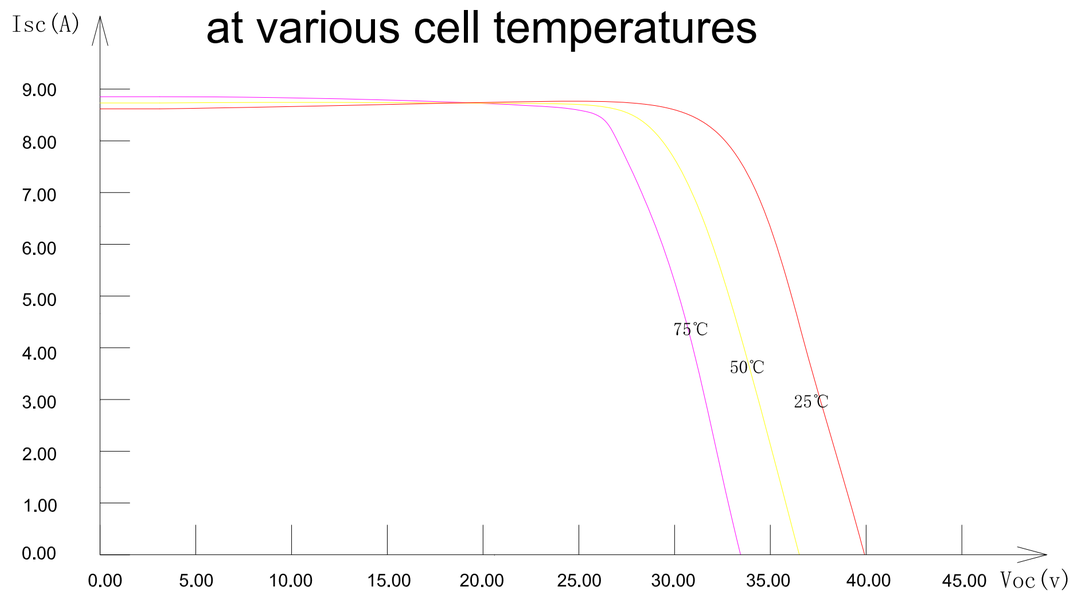
Characteristics	ZA1ZDNY-260P60	ZA1ZDNY-265P60	ZA1ZDNY-270P60	ZA1ZDNY-275P60	ZA1ZDNY-280P60
Max.Power(Pmax)	260W	265W	270W	275W	280W
Optimum Operating Voltage(Vm)	30.73V	30.92V	31.08V	31.22V	31.41V
Optimum Operating Current(Im)	8.47A	8.58A	8.69A	8.81A	8.92A
Open-Circuit Voltage(Voc)	37.90V	38.15A	38.26V	38.37V	38.45V
Short-circuit Current(Isc)	9.01A	9.10A	9.22A	9.31A	9.40A
Cell Efficiency	17.81%	18.15%	18.49%	18.83%	19.18%
Module efficiency	15.98%	16.29%	16.60%	16.90%	17.21%

The specifications are obtained under the Standard Test Condition (STC): 1000W/m^2 solar irradiance, AM1.5, Cell Temperature 25℃.

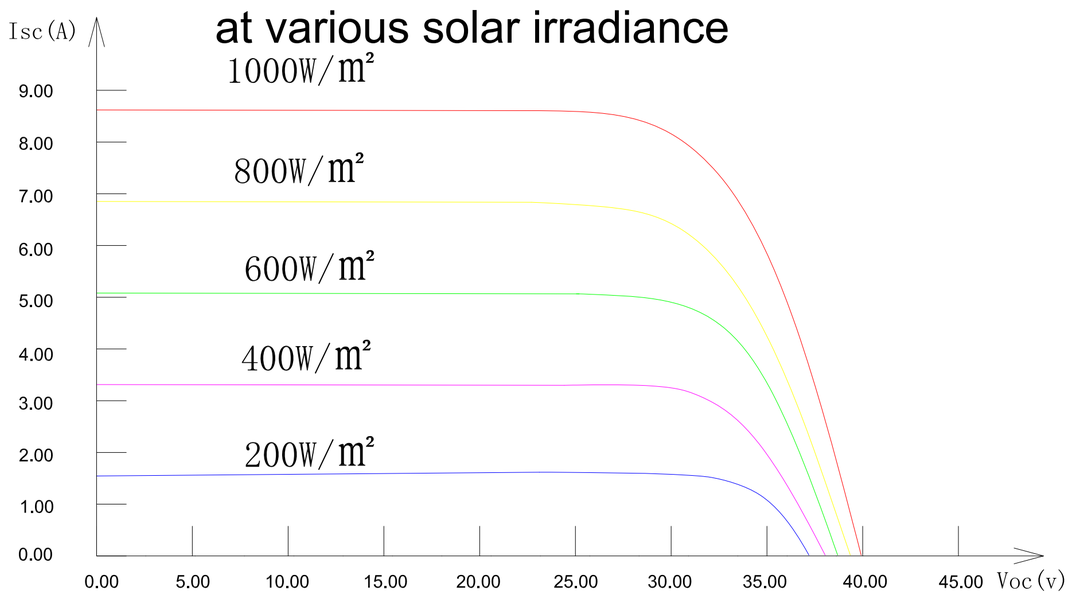
Solar Cell	Poly-crystalline 156*156mm
Measurement Tolerance(Pmax)	0 ～ +5 W
Number of cells	60 cells in series
Module Dimension	1640*992*40mm
Weight	18.20kg
Max.System Voltage	1500V DC
Max.Series Fuse Rating	15A
Cables	PV 4mm^2,90cm±5
Connectors	Ningbo Guangzhixing
	PV-GZX1500 IP67
Number of bypass diodes	3
Temperature cycling range	(-40 ～ 85 ℃)
NOCT	47℃ ±2℃
Temperature coefficients of Isc	+0.046%/K
Temperature coefficients of Voc	-0.303%/K
Temperature coefficients of Pmax	-0.41%/K
Fire safety class (UL790)	Class C
Load Capacity	342pcs/20'GP
	812pcs/40'HQ



I-V Curves of PV module ZA1ZDNY-270P60 at various cell temperatures



I-V Curves of PV module ZA1ZDNY-270P60 at various solar irradiance

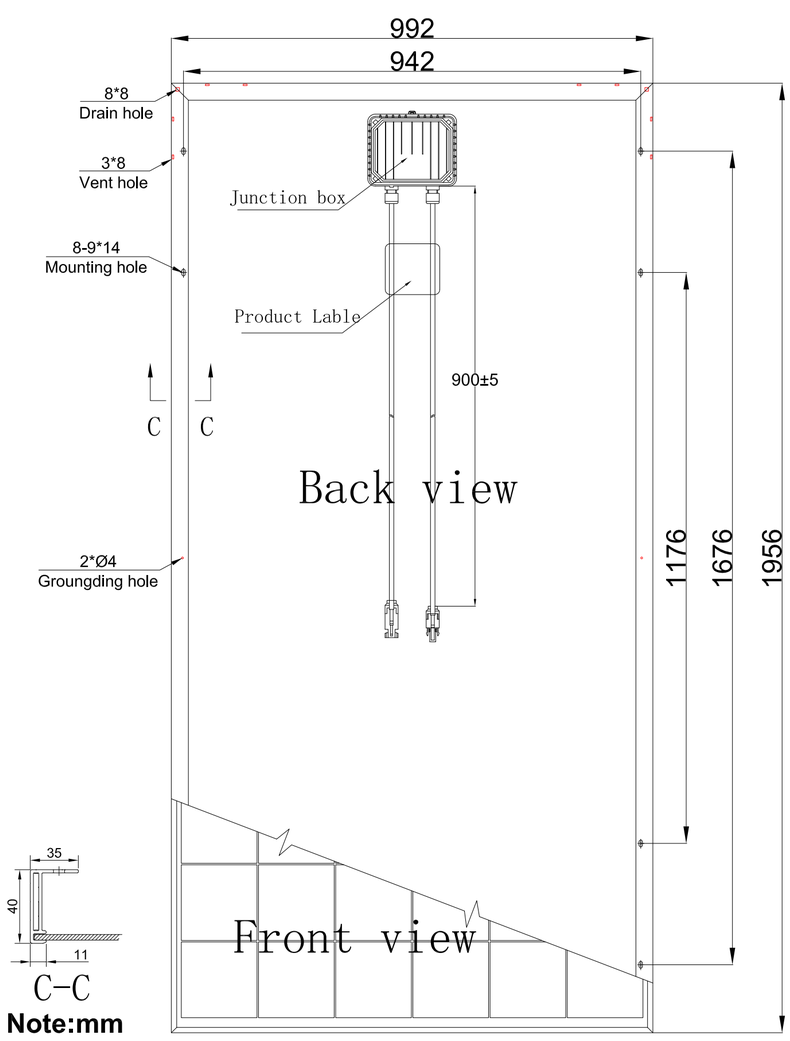


Typical electrical characteristics

Characteristics	ZA1ZDNY-310P72	ZA1ZDNY-315P72	ZA1ZDNY-320P72	ZA1ZDNY-325P72	ZA1ZDNY-330P72
Max.Power(Pmax)	310W	315W	320W	325W	330W
Optimum Operating Voltage(Vm)	36.91V	37.01V	37.05V	37.09V	37.13V
Optimum Operating Current(Im)	8.41A	8.52A	8.64A	8.77A	8.89A
Open-Circuit Voltage(Voc)	45.65V	45.70V	45.70V	45.74V	45.76V
Short-circuit Current(Isc)	8.85A	8.98A	9.09A	9.20A	9.27A
Cell Efficiency	17.69%	17.98%	18.26%	18.55%	18.83%
Module efficiency	15.98%	16.23%	16.49%	16.75%	17.01%

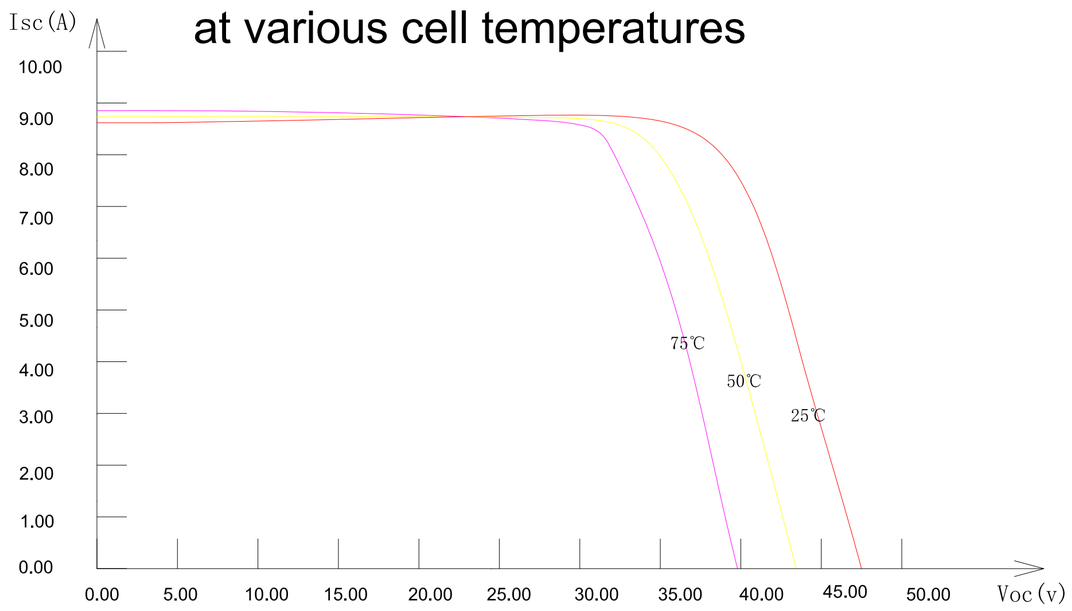
The specifications are obtained under the Standard Test Condition (STC): 1000W/m^2 solar irradiance, AM1.5, Cell Temperature 25℃.

Solar Cell	Poly-crystalline 156*156mm
Measurement Tolerance(Pmax)	0 ～ +5 W
Number of cells	72 cells in series
Module Dimension	1956*992*40mm
Weight	21.50kg
Max.System Voltage	1500V DC
Max.Series Fuse Rating	15A
Cables	PV 4mm^2,90cm±5
Connectors	Ningbo Guangzhixing
	PV-GZX1500 IP67
Number of bypass diodes	3
Temperature cycling range	(-40 ～ 85 ℃)
NOCT	47℃ ±2℃
Temperature coefficients of Isc	+0.046%/K
Temperature coefficients of Voc	-0.303%/K
Temperature coefficients of Pmax	-0.41%/K
Fire safety class (UL790)	Class C
Load Capacity	290pcs/20'GP
	668pcs/40'HQ

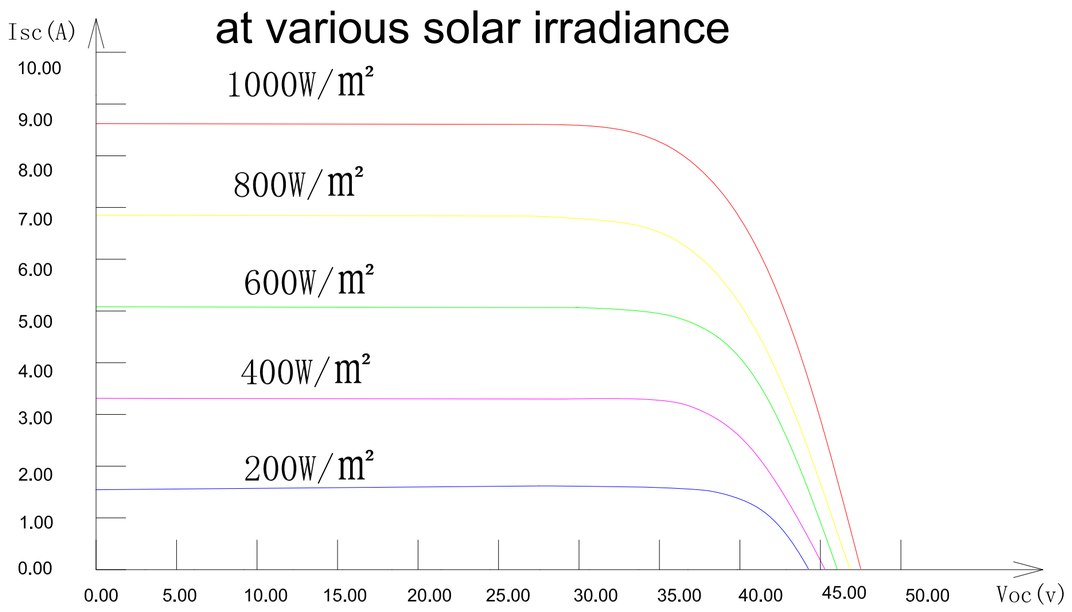


Note:mm

I-V Curves of PV module ZA1ZDNY-320P72 at various cell temperatures



I-V Curves of PV module ZA1ZDNY-320P72 at various solar irradiance

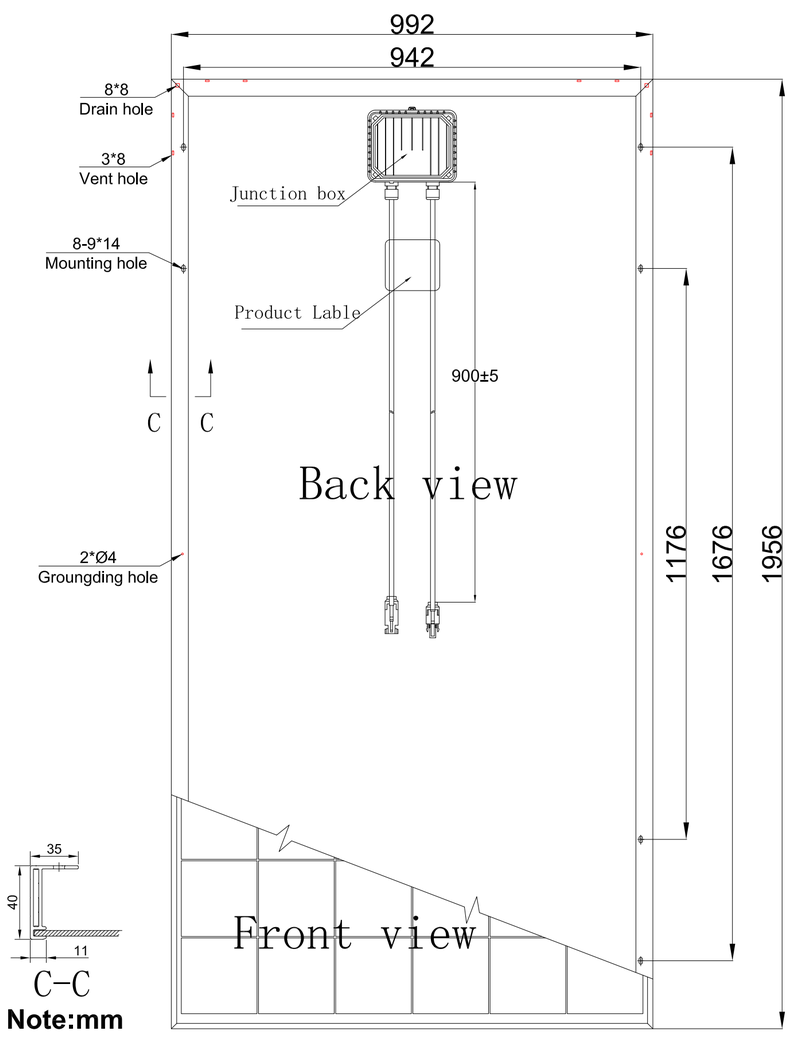


Typical electrical characteristics

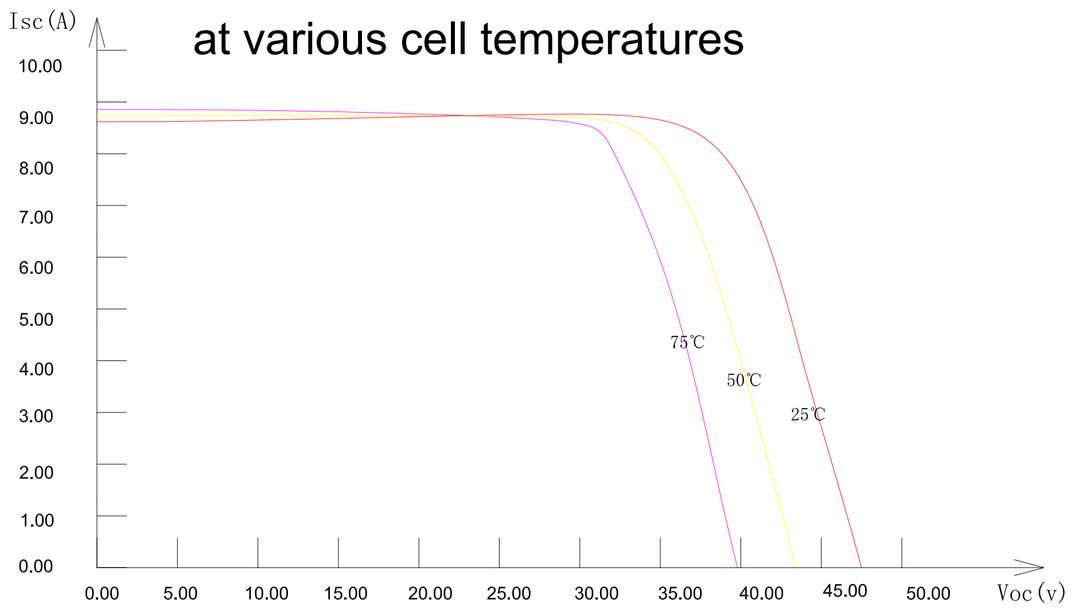
Characteristics	ZA1ZDNY-335P72
Max.Power(Pmax)	335W
Optimum Operating Voltage(Vm)	37.19V
Optimum Operating Current(Im)	9.01A
Open-Circuit Voltage(Voc)	45.83V
Short-circuit Current(Isc)	9.34A
Cell Efficiency	19.11%
Module efficiency	17.27%

The specifications are obtained under the Standard Test Condition (STC): 1000W/m^2 solar irradiance, AM1.5, Cell Temperature 25℃.

Solar Cell	Poly-crystalline 156*156mm
Measurement Tolerance(Pmax)	0 ～ +5 W
Number of cells	72 cells in series
Module Dimension	1956*992*40mm
Weight	21.50kg
Max.System Voltage	1500V DC
Max.Series Fuse Rating	15A
Cables	PV 4mm^2,90cm±5
Connectors	Ningbo Guangzhixing
	PV-GZX1500 IP67
Number of bypass diodes	3
Temperature cycling range	(-40 ～ 85 ℃)
NOCT	47℃ ±2℃
Temperature coefficients of Isc	+0.046%/K
Temperature coefficients of Voc	-0.303%/K
Temperature coefficients of Pmax	-0.41%/K
Fire safety class (UL790)	Class C
Load Capacity	290pcs/20'GP
	668pcs/40'HQ



I-V Curves of PV module ZA1ZDNY-320P72 at various cell temperatures



I-V Curves of PV module ZA1ZDNY-320P72 at various solar irradiance