

**For a Free Quote:**

**Web: [EnergyPal.com/solar](http://EnergyPal.com/solar)**

**Call: 1-800-990-3725**

**Email: [contact@energypal.com](mailto:contact@energypal.com)**

# **EnergyPal**

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

**Qingdao Yinghua Solar Co., Ltd.**

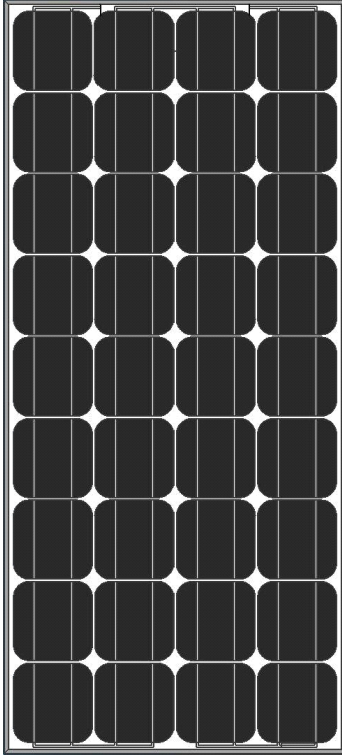
**AS-5M18 90-105W**

**AS-5M18-95W**

Also available on the web at  
[EnergyPal.com/qingdao-yinghua-solar-co-ltd-solar-panels/as-5m18-95w](http://EnergyPal.com/qingdao-yinghua-solar-co-ltd-solar-panels/as-5m18-95w)

## AS-5M18

### MONOCRYSTALLINE MODULE



**Passionately  
committed to  
delivering innovative  
energy solution**

#### ADVANCED PERFORMANCE & PROVEN ADVANTAGES

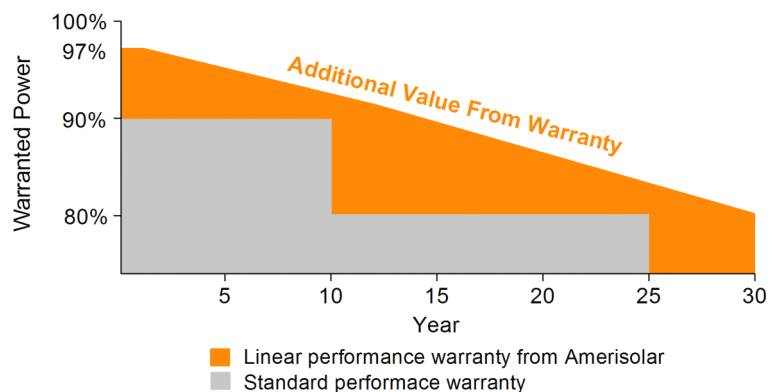
- High module conversion efficiency up to 16.11% through advanced manufacturing technology.
- Low degradation and excellent performance under high temperature and low light conditions.
- Robust aluminum frame ensures the modules to withstand wind loads up to 2400Pa.
- Positive power tolerance of 0 ~ +3 %.
- High ammonia and salt mist resistance.
- Potential induced degradation (PID) resistance.

#### CERTIFICATIONS

- IEC61215, IEC61730, IEC62716, IEC61701, UL1703, CE, ETL(USA), JET(Japan), J-PEC(Japan), MCS(UK), CEC(Australia), FSEC(FL-USA), CSI Eligible(CA-USA), Israel Electric(Israel), Kemco(South Korea), InMetro(Brazil), TSE(Turkey)
- ISO9001:2008: Quality management system
- ISO14001:2004: Environmental management system
- OHSAS18001:2007: Occupational health and safety management system

#### SPECIAL WARRANTY

- 12 years limited product warranty.
- Limited linear power warranty: 12 years 91.2% of the nominal power output, 30 years 80.6% of the nominal power output.



## ELECTRICAL CHARACTERISTICS AT STC

Nominal Power ( $P_{max}$ )	90W	95W	100W	105W
Open Circuit Voltage ( $V_{oc}$ )	22.2V	22.4V	22.6V	22.8V
Short Circuit Current ( $I_{sc}$ )	5.38A	5.56A	5.75A	5.90A
Voltage at Nominal Power ( $V_{mp}$ )	18.0V	18.2V	18.4V	18.6V
Current at Nominal Power ( $I_{mp}$ )	5.00A	5.22A	5.43A	5.65A
Module Efficiency (%)	13.81	14.57	15.34	16.11
Operating Temperature	-40°C to +85°C			
Maximum System Voltage	1000V DC			
Fire Resistance Rating	Type 1(UL1703)/Class C(IEC61730)			
Maximum Series Fuse Rating	10A			

STC: Irradiance 1000W/m<sup>2</sup>, Cell temperature 25°C, AM1.5

## ELECTRICAL CHARACTERISTICS AT NOCT

Nominal Power ( $P_{max}$ )	66W	70W	74W	77W
Open Circuit Voltage ( $V_{oc}$ )	20.4V	20.6V	20.8V	21.0V
Short Circuit Current ( $I_{sc}$ )	4.36A	4.50A	4.66A	4.78A
Voltage at Nominal Power ( $V_{mp}$ )	16.4V	16.6V	16.7V	16.9V
Current at Nominal Power ( $I_{mp}$ )	4.03A	4.22A	4.43A	4.56A

NOCT: Irradiance 800W/m<sup>2</sup>, Ambient temperature 20°C, Wind Speed 1 m/s

## MECHANICAL CHARACTERISTICS

Cell type	Monocrystalline 125x125mm (5x5inches)
Number of cells	36 (4x9)
Module dimensions	1196x545x35mm (47.09x21.46x1.38inches)
Weight	8kg (17.6lbs)
Front cover	3.2mm (0.13inches) low-iron tempered glass
Frame	Anodized aluminum alloy
Junction box	IP65, 2 diodes
Cable	4mm <sup>2</sup> (0.006inches <sup>2</sup> ), 900mm (35.43inches)
Connector	MC4 or MC4 compatible

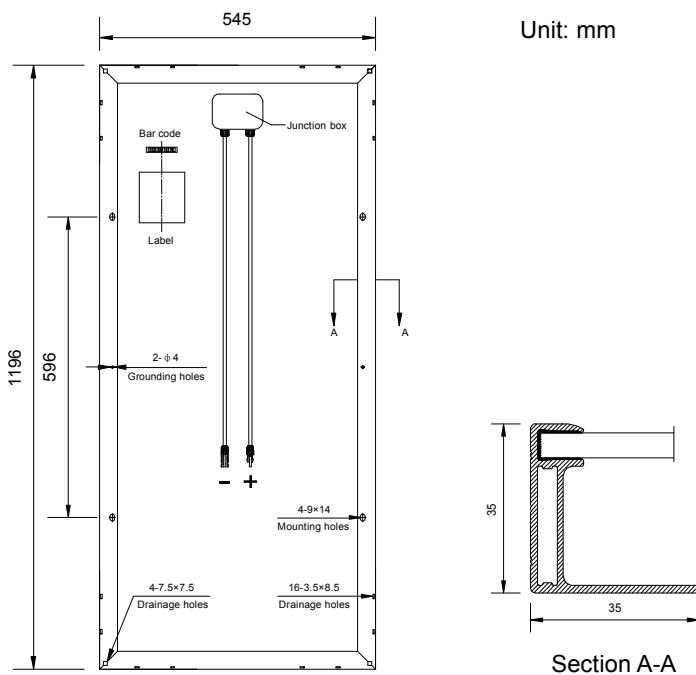
## TEMPERATURE CHARACTERISTICS

Nominal Operating Cell Temperature (NOCT)	45°C ±2°C
Temperature Coefficients of $P_{max}$	-0.43%/°C
Temperature Coefficients of $V_{oc}$	-0.33%/°C
Temperature Coefficients of $I_{sc}$	0.056%/°C

## PACKAGING

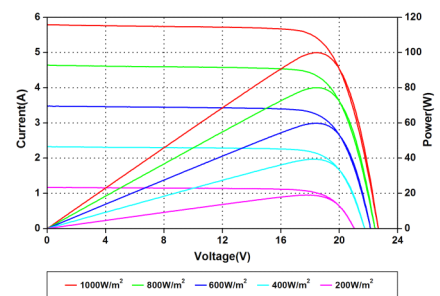
Standard packaging	29pcs/pallet
Module quantity per 20' container	696 pcs
Module quantity per 40' container	1566 pcs

## ENGINEERING DRAWINGS

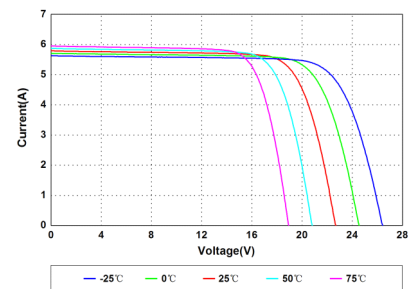


Specifications in this datasheet are subject to change without prior notice.

## IV CURVES



Current-Voltage and Power-Voltage Curves at Different Irradiances



Current-Voltage Curves at Different Temperatures