WWW.KINSE-SOLAR.COM

Kinse Solar

*KS***-120-M182*

MONO-FACIAL MODULE

P-Type

Positive power tolerance of 0~+5W

IEC61215(2016), IEC61730(2016)

ISO9001:2015: Quality Management System

ISO14001:2015: Environment Management System

ISO45001:2018
Occupational health and safety management systems

Key Features

Multi Busbar Technology

Better light trapping and current collection to improve module power output and reliability.

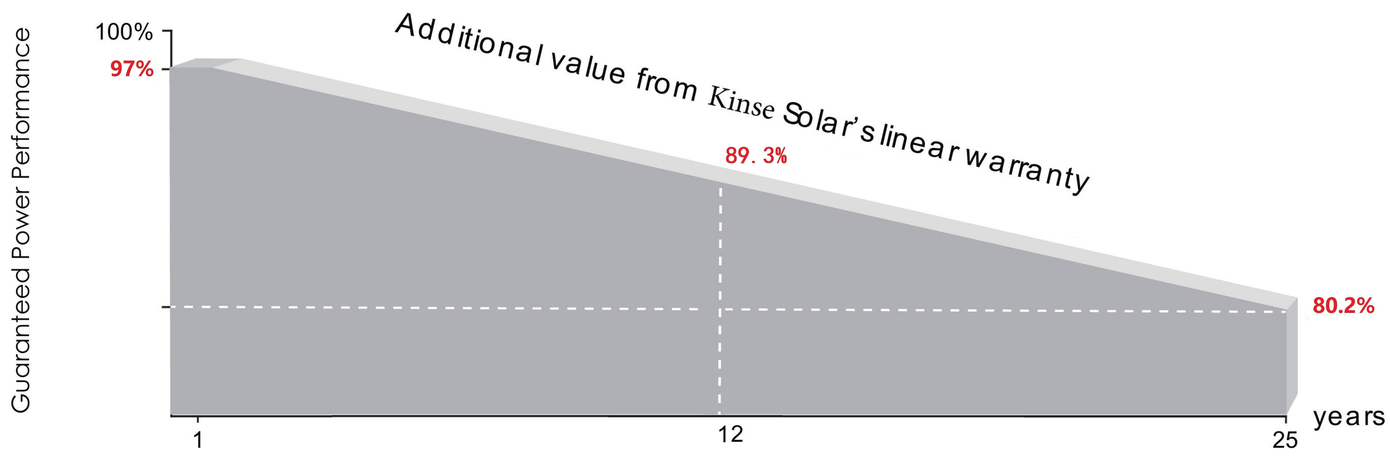
Enhanced Mechanical Load

Certified to withstand: wind load (2400 Pascal) and snow load (5400 Pascal).

Reduced Hot Spot Loss

Optimized electrical design and lower operating current for reduced hot spot loss and better temperature coefficient.

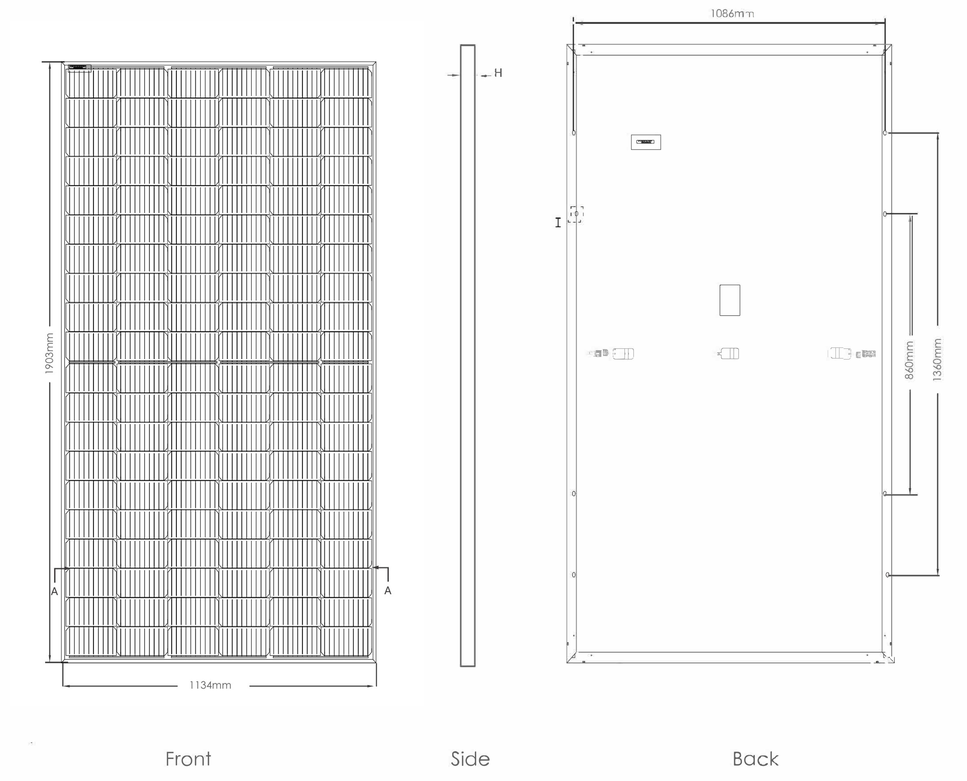
LINEAR PERFORMANCE WARRANTY

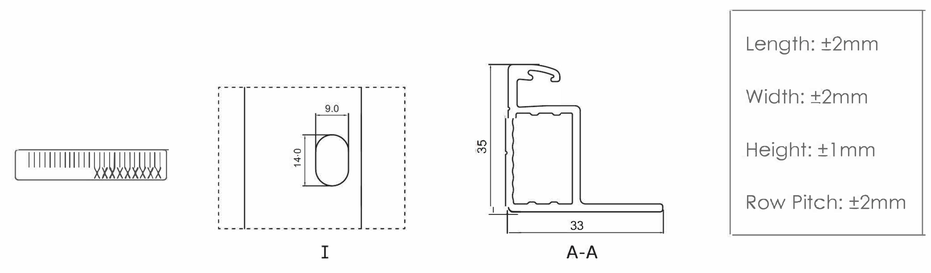


10 Year Product Warranty

25 Year Linear Power Warranty

Engineering Drawings





Length: ±2mm

Width: ±2mm

Height: ±1mm

Row Pitch: ±2mm

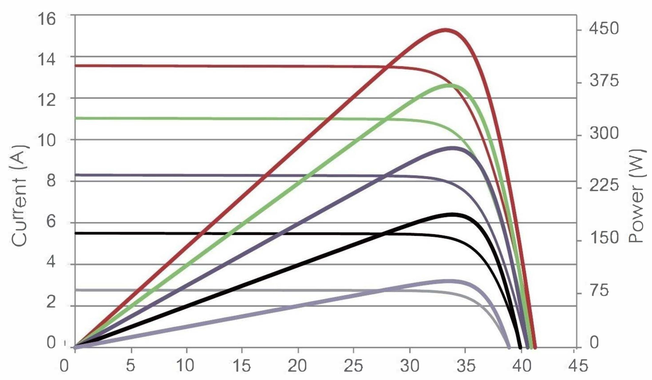
Packaging Configuration

(Two pallets = One stack)

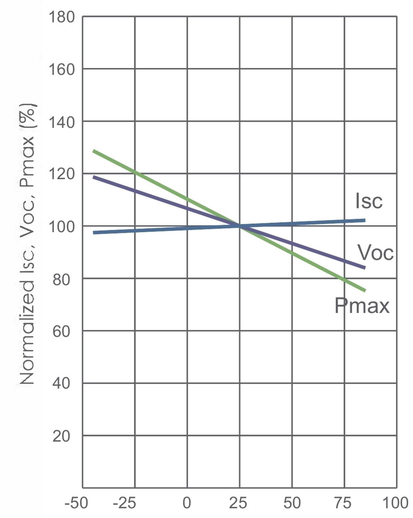
31pcs/pallets, 62pcs/stack, 744pcs/ 40'HQ Container

Electrical Performance & Temperature Dependence

Current-Voltage & Power-Voltage Curves (450W)



Temperature Dependence of Isc, Voc, Pmax



Mechanical Characteristics

Cell Type	P type Mono-crystalline
No. of cells	120 (6×20)
Dimensions	1909×1134×35mm
Weight	24.2 kg
Front Glass	3.2mm,Anti-Reflection Coating, High Transmission, Low Iron, Tempered Glass
Frame	Anodized Aluminium Alloy
Junction Box	IP68 Rated
Output Cables	TUV 1×4.0mm² (+): 300mm , (-): 300mm or Customized Length
Connector	Make: Tonglin Model: TL-CABLE01S

SPECIFICATIONS

Module Type	KS440-120-M182		KS445-120-M182		KS450-120-M182		KS455-120-M182		KS460-120-M182	
	STC	NOCT	STC	NOCT	STC	NOCT	STC	NOCT	STC	NOCT
Maximum Power (Pmax)	440Wp	335Wp	445Wp	339Wp	450Wp	342Wp	455Wp	346Wp	460Wp	350Wp
Maximum Power Voltage (Vmp)	33.9V	31.60V	34.10V	31.71V	34.30V	31.83V	34.50V	31.95V	34.70V	32.05V
Maximum Power Current (Imp)	12.98A	10.40A	13.06A	10.46A	13.14A	10.52A	13.20A	10.58A	13.27A	10.64A
Open-circuit Voltage (Voc)	41.00V	38.75V	41.20V	38.86V	41.40V	38.96V	41.60V	39.06V	41.80V	39.16V
Short-circuit Current (Isc)	13.41A	11.06A	13.49A	11.13A	13.60A	11.19A	13.69A	11.25A	13.78A	11.32A
Module Efficiency STC (%)	20.39%		20.62%		20.85%		21.08%		21.32%	
Operating Temperature(℃)	-40℃~+85℃									
Maximum system voltage	1500VDC (IEC)									
Maximum series fuse rating	25A									
Power tolerance	0~+5W									
Temperature coefficients of Pmax	-0.35%/℃									
Temperature coefficients of Voc	-0.28%/℃									
Temperature coefficients of Isc	0.048%/℃									
Nominal operating cell temperature (NOCT)	45±2℃									
Country of manufacture	Made In China									
Fire Rating	Class C									

Kinse Solar

*STC: Irradiance 1000W/m² Ambient Temperature 25°C AM=1.5

NOCT: Irradiance 800W/m² Ambient Temperature 20°C AM=1.5 Wind Speed 1m/s

Power Allowance Range: ±3%

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

Maanshan Kinse Energy Technology Co., LTD