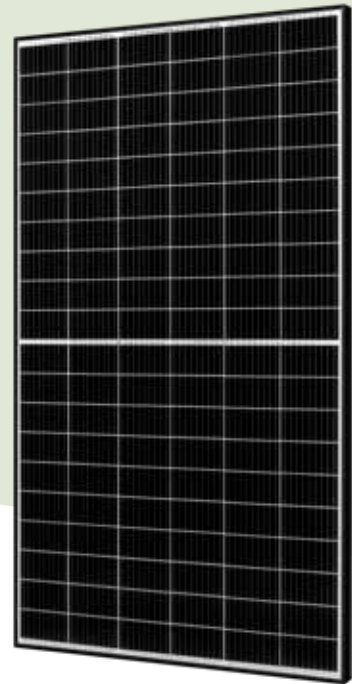




# KSM 440 | 460

POWER RANGE
440W-460W

CELL SIZE
182 mm



## JUNCTION BOX

Waterproof protection grade: IP68  
 Safety Level: Class II  
 Maximum System Voltage: 1.500 V  
 Outstanding waterproof level  
 Effectively resist harsh environments

## FRAME

Strong load resistance up to 5400 Pa  
 Anodized aluminium frame in silver



### Half-cut Technology

New circuit design, lower internal current and lower internal resistance loss.



### Significant heat spot avoidance

A unique circuit design to significantly reduce the temperature of heat spots, thus reducing power loss and increasing module output.



### Lower cost

Increasing power generation can reduce the cost per kilowatt-hour.



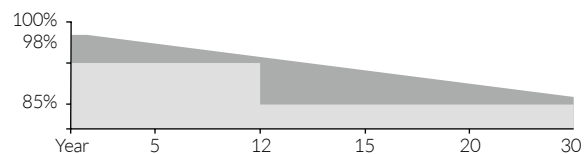
### Excellent PID-resistance performance

The PID-resistance performance (Potential Induced Degradation) meets TUV Nord standards.

## QUALIFICATIONS AND CERTIFICATES



## WARRANTY



**10**  
YEARS

Guarantee on product material and workmanship

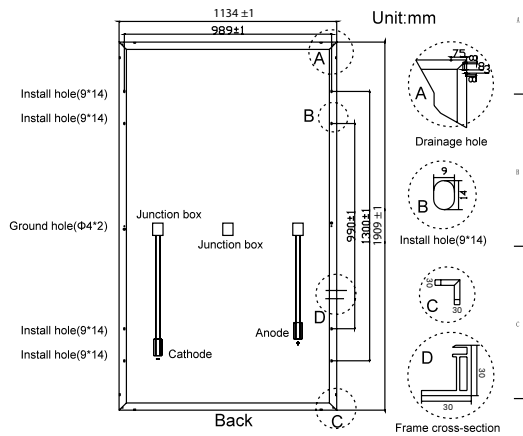
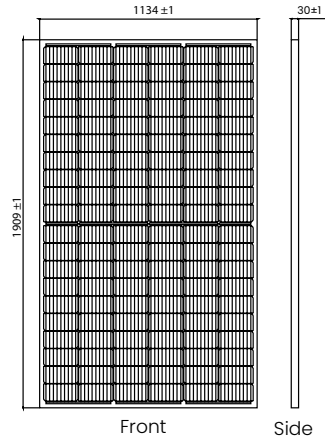
**25**  
YEARS

Linear Power output warranty

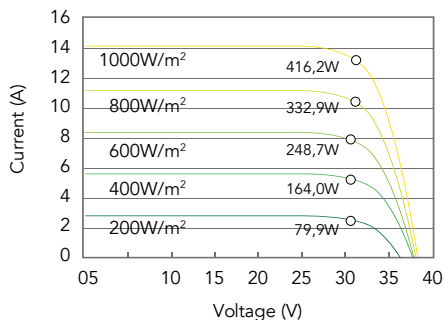
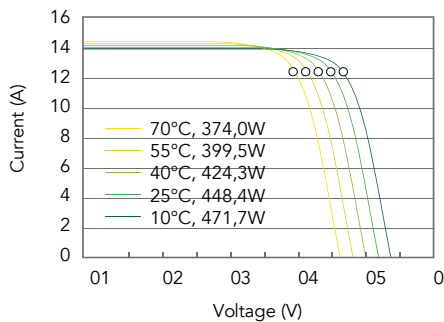
## PV DRAWINGS

Unit: mm

(1909\*1134\*30)



## IV CURVE (460 W)



## ELECTRICAL DATA (STC)

Model Type	KSM440/120-182	KSM460/120-182
Peak Power (Pmax) (W)	440	460
Maximum Power Voltage (Vmp) (V)	34.20	35.00
Maximum Power Current (Imp) (A)	12.84	13.08
Open Circuit Voltage (Voc) (V)	41.00	41.80
Short Circuit Current (Isc) (A)	13.58	13.78
Module Efficiency (%)	20.32	21.24

STC (Standard Testing Condition): Irradiance 1000 W/m<sup>2</sup>, Cell Temperature 25°C, Spectra at AM 1.5; Test uncertainty tolerance for Pmax, Voc and Isc: ±3 %

## ELECTRICAL DATA (NOCT)

Model Type	KSM440/120-182	KSM460/120-182
Peak Power (Pmax) (W)	324	339
Maximum Power Voltage (Vmp) (V)	31.94	32.74
Maximum Power Current (Imp) (A)	10.14	10.35
Open Circuit Voltage (Voc) (V)	38.28	39.08
Short Circuit Current (Isc) (A)	10.68	10.88

NOCT (Nominal Operating Cell Temperature): Irradiance 800 W/m<sup>2</sup>, Ambient Temperature 20°C, Spectra at AM 1.5, Wind at 1 m/s

## TEMPERATURE & MAXIMUM RATING

Maximum System Voltage (V)	1500 V
Maximum Series Fuse Rating (A)	25 A
Power Tolerance	0 ~ +3 W
Pmax Temperature Coefficients W/°C	-0,36 %/°C
Voc Temperature Coefficients V/°C	-0,28 %/°C
Isc Temperature Coefficients A/°C	+0,05 %/°C
NOCT Nominal Operating Cell Temperature (°C)	45°C ± 2°C
Operating and Storage Temperature (°C)	-40°C ~ +85°C

## MECHANICAL CHARACTERISTICS

Cell Type	Mono M10 182 multibusbar
No. of Cells	120 (6x20)
Dimensions	1909*1134*30 mm (± 0.7 %)
Weight	23 kg ± 3 %
Front Glass	3.2 mm high transmission, low iron, tempered glass
Frame	Silver aluminium
Junction box	IP68, 3 diodes
Output cables	4 mm <sup>2</sup> , cable approx 130 cm, QC4 compatible
Max. Wind Load/Snow Load	2400 Pa/5400 Pa

## PACKAGING METHOD

40 HQ Container	24 packages / 864 pcs
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