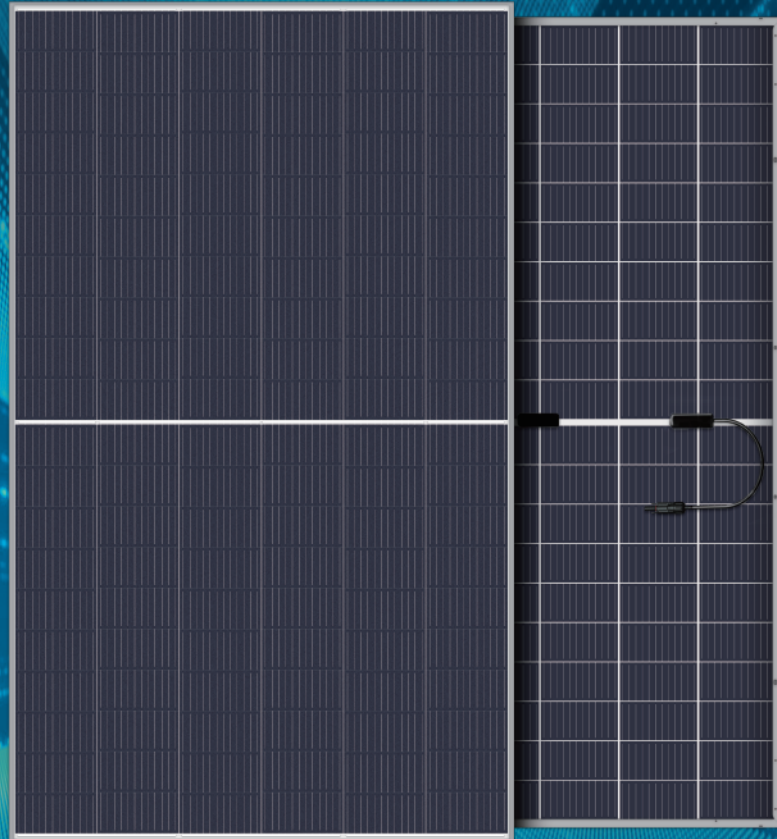




# 590-610W

## SKA610MDGDC

### MONO 12BB Half-cut Bifacial Dual-Glass Module



#### Fire class A, harsh environment adaptability

The back of the dual-glass module adopts high transparent glass, which can adapt to all kinds of harsh environment, and the fire rating can reach Class A.



#### 30-year power warranty

The average life of dual-glass modules is 30 years, 5 years longer than that of single-glass modules.



#### Double-sided power generation, higher income

The dual-glass module has a double-sided ratio of up to 70% and a power generation gain of 5%-20% on the back side.



#### 1500V system voltage

Due to the higher system voltage, the number of modules per string can be increased by 1/3, reducing the overall construction cost of the power station.

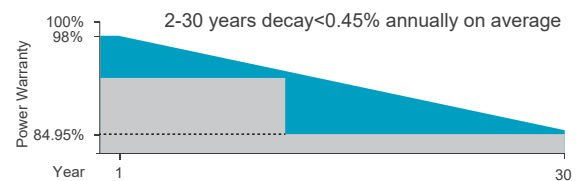
## LINEAR PERFORMANCE WARRANTY



Product warranty on materials and workmanship



Linear power output warranty



## CERTIFICATES

ISO 9001: 2015  
Quality Management System

IEC 61215 / IEC 61730

ISO 14001: 2015  
Environmental Management System

ISO 45001 : 2018  
Occupational Health & Safety Management System

\*Certification requirements vary in different markets, please consult with Akcome Optronics sales team for appropriate certification.



# 590-610W

MONO 12BB Half-cut Bifacial  
Dual-Glass Module



## ELECTRICAL PARAMETERS @ STC

	590	595	600	605	610
Max. Power Output Pmax (W)	590	595	600	605	610
Power Tolerance	0~+3%	0~+3%	0~+3%	0~+3%	0~+3%
Max. Power Voltage Vmp (V)	34.21	34.40	34.61	34.82	35.03
Max. Power Current Imp (A)	17.25	17.30	17.34	17.38	17.42
Open Circuit Voltage Voc (V)	41.30	41.50	41.70	41.90	42.10
Short Circuit Current Isc (A)	18.31	18.36	18.42	18.48	18.54
Module Efficiency (%)	20.85	21.03	21.21	21.38	21.56

\*STC (Standard Test Condition): Irradiance 1000W/m<sup>2</sup>, Cell Temperature 25°C, Air Mass 1.5  
\*Measurement Tolerance (±3.0%)

## Integrated Power @ STC (Reference to 600W front)

Power Gains	5%	10%	15%	20%	25%
Max. Power Output Pmax (W)	630	660	710	741	772
Max. Power Voltage Vmp (V)	34.61	34.61	35.61	35.61	35.61
Max. Power Current Imp (A)	18.21	19.07	19.94	20.81	21.68
Open Circuit Voltage Voc (V)	41.70	41.70	40.50	40.50	40.50
Short Circuit Current Isc (A)	19.34	20.26	21.18	22.10	23.03

## TEMPERATURE COEFFICIENTS

Temperature Coefficients of Pmp	-0.34%/°C
Temperature Coefficients of Voc	-0.25%/°C
Temperature Coefficients of Isc	+0.040%/°C

## MECHANICAL PARAMETERS

Cell Type	Mono 210x105mm
Number of Cells	120pcs(6x20)
Dimensions (L*W*H)	2172x1303x33mm
Weight	34.9kg
Frame	Anodised Aluminum
Junction Box	IP68, 3 bypass diodes
Cable, Length	4.0mm <sup>2</sup> , 300mm

## OPERATING CONDITION

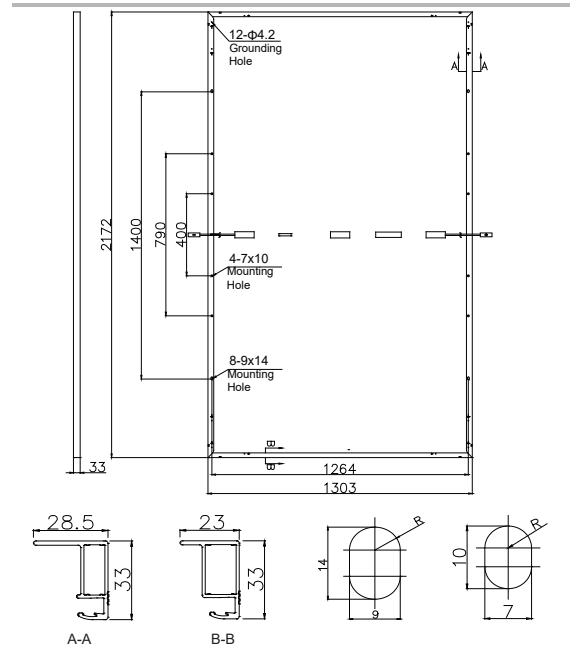
Maximum System Voltage(V)	1500(DC)
Operating Temperature(°C)	-40~+85
Max. Wind Load / Snow Load(Pa)	2400/5400
Max. Series Fuse Rating(A)	35
Fire Rating	Class A
Bifaciality	70±5%
NOCT	45°C

## PACKAGE INFORMATION

Container 40'HQ	594pcs
Quantity / Pallet	33pcs
Package size: 1310x1100x2302mm;	Net weight: 1551.7kg; Gross weight: 1195.2kg

Ver: 20221225-1

## ASSEMBLY DRAWING (Unit:mm)



## I-V CURVES

