

# ALPINE Series

Half-Cell Bifacial Module

**595-610Wp** | **21.55%**  
Module Power Output | Max Efficiency



## Key Features



High module conversion efficiency



Better temperature coefficient



Super multi busbar technology



Low attenuation long warranty



Superior load capacity



Higher bifacially

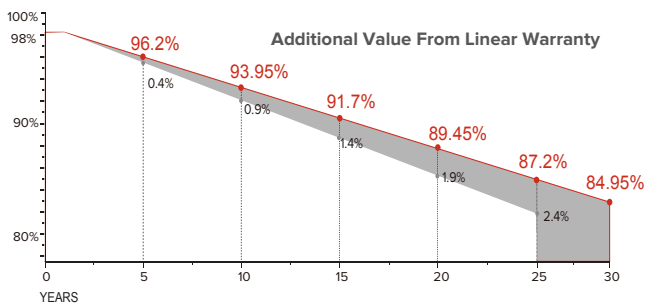


USA based liability insurance.



Houston, Texas based company.

## Warranty



**15** <Years> Guarantee on product material and workmanship

**30** <Years> Linear power output warranty

## Product Certification

IEC61215:2016; IEC 61730:2016; UL61730

IEC62804 PID

IEC61701 Salt Mist

IEC62716 Ammonia Resistance

IEC60068 Dust and Sand

IEC61215 Hailstone

Fire Type (UL61730):Type29

ISO14001:2015; ISO9001:2015; ISO45001:2018



## About SEG Solar

SEG Solar is a leading manufacturer of high-performance solar panels for residential, commercial, and utility applications. The company, headquartered in Houston, Texas, is committed to providing cost-effective and reliable solar solutions that help customers reduce their energy costs and carbon footprint.



Download Datasheet

## Electrical Characteristics

Module Type	SEG-595-BMB-BG			SEG-600-BMB-BG			SEG-605-BMB-BG			SEG-610-BMB-BG		
	Front STC	Front NOCT	Back STC	Front STC	Front NOCT	Back STC	Front STC	Front NOCT	Back STC	Front STC	Front NOCT	Back STC
Maximum Power -Pmp(Wp)*	595	446	417	600	450	420	605	454	424	610	458	427
Open Circuit Voltage -Voc(V)	41.49	39.42	41.47	41.69	39.61	41.67	41.89	39.80	41.87	42.09	39.99	42.07
Short Circuit Current -Isc(A)	18.34	14.67	12.84	18.40	14.72	12.88	18.46	14.77	12.92	18.52	14.82	12.96
Maximum Power Voltage -Vmp(V)	34.38	32.22	34.37	34.58	32.40	34.56	34.78	32.58	34.75	34.98	32.75	34.94
Maximum Power Current -Imp(A)	17.31	13.85	12.12	17.36	13.89	12.15	17.41	13.93	12.19	17.46	13.97	12.22
Module Efficiency(%)	21.02			21.20			21.38			21.55		
Power Tolerance(W)	(0, +4.99)											
Maximum System Voltage	1500V DC											
Maximum Series Fuse Rating	35 A											
Bifaciality	70%±10%											

STC: Irradiance 1000 W/m<sup>2</sup> module temperature 25°C AM=1.5

NOCT: Irradiance 800W/m<sup>2</sup> ambient temperature 20°C module temperature 45°C wind speed: 1m/s

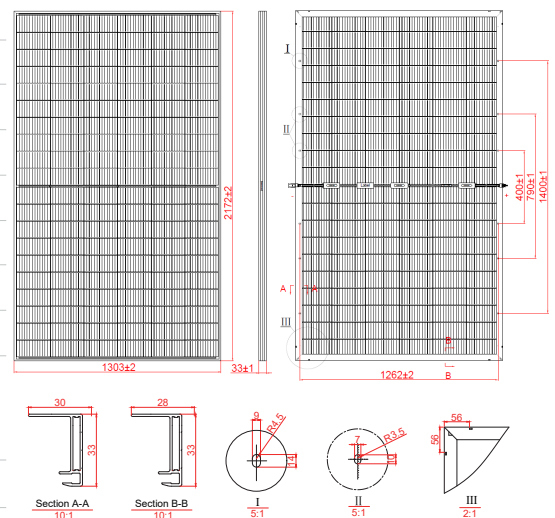
\*Measuring tolerance: ±3%

## Mechanical Specifications

External Dimension	2172 x 1303 x 33 mm
Weight	35.0kg
Solar Cells	PERC Mono 210 x 105 mm(120 pcs)
Front Glass	2.0 mm AR coating semi-tempered glass
Back Glass	2.0 mm Semi-tempered glass
Frame	Anodized aluminium alloy
Junction Box	IP68 / 3 diodes
Connector Type	PV-CO02-xy / MC4
Cable Type	12 AWG PV Wire (UL)
Cable Length	Portrait: 400 mm(+)/ 200 mm(-) Landscape: 1200 mm(+)/ 1200 mm(-) or customized length
Mechanical Load(Front)	5400 Pa / 113 psf*
Mechanical Load(Rear)	2400 Pa / 50 psf*

\*Refer to SEG installation Manual for details

## Technical Drawing

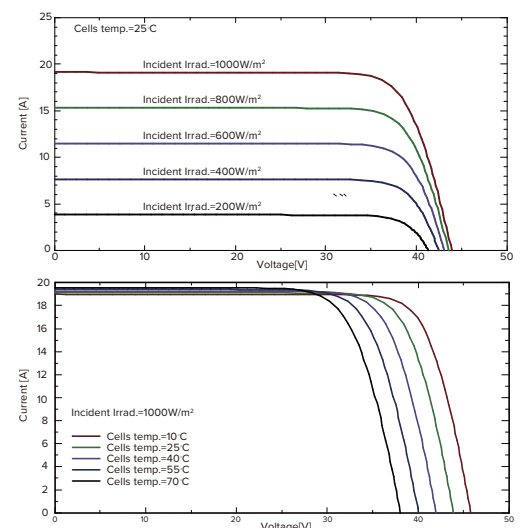


\*Refer to SEG installation Manual for details

## Packing Configuration

Container	40'HQ
Pieces per Pallet	31
Pallets per Container	18
Pieces per Container	558

## I-V Curve



## Temperature Characteristics

Pmax Temperature Coefficient	-0.34 %/°C
Voc Temperature Coefficient	-0.25 %/°C
Isc Temperature Coefficient	+0.05 %/°C
Operating Temperature	-40~+85 °C
Nominal Operating Cell Temperature (NOCT)	45±2 °C