



ALPINE Series

Half-Cell Bifacial Module

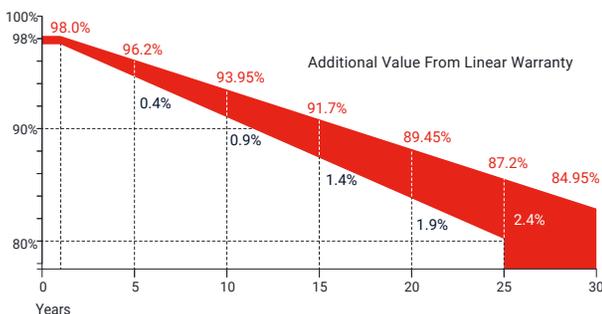
595-610Wp | **21.55%**
 Module Power Output | Max Efficiency



Key Features

-  High module conversion efficiency
-  Better temperature coefficient
-  Super multi busbar technology
-  Low attenuation long warranty
-  Superior load capacity
-  Higher bifaciality
-  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; IEC61730; UL61215; UL61730					
IEC62804	PID				
IEC61701	Salt Mist				
IEC62716	Ammonia Resistance				
IEC60068	Dust and Sand				
IEC61215	Hailstone				
Fire Type (UL61730): Type 29					
ISO14001:2015; ISO9001:2015; ISO45001:2018					
					
					

About SEG Solar

Founded in 2016, SEG is a leading vertically integrated PV manufacturer headquartered in Houston, Texas, U.S., and is dedicated to delivering reliable and cost-effective solar modules to the utility, commercial, and residential markets. By the end of 2024, SEG had shipped over 6 GW of solar modules worldwide and have achieved a module production capacity of 6 GW.



Download Datasheet

Electrical Characteristics

Module Type	SEG-595-BMB-BG			SEG-600-BMB-BG			SEG-605-BMB-BG			SEG-610-BMB-BG		
	STC	NOCT	BNPI									
Maximum Power -Pmp(Wp)*	595	446	651	600	450	657	605	454	662	610	458	668
Open Circuit Voltage -Voc(V)	41.49	39.42	41.49	41.69	39.61	41.69	41.89	39.80	41.89	42.09	39.99	42.09
Short Circuit Current -Isc(A)	18.34	14.67	20.07	18.40	14.72	20.14	18.46	14.77	20.20	18.52	14.82	20.27
Maximum Power Voltage -Vmp(V)	34.38	32.22	34.38	34.58	32.40	34.58	34.78	32.58	34.78	34.98	32.75	34.98
Maximum Power Current -Imp(A)	17.31	13.85	18.95	17.36	13.89	19.00	17.41	13.93	19.06	17.46	13.97	19.11
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/m² module temperature 25°C AM=1.5

NOCT: Irradiance 800W/m² ambient temperature 20°C module temperature 45°C wind speed: 1m/s

*Measuring tolerance: ±3%

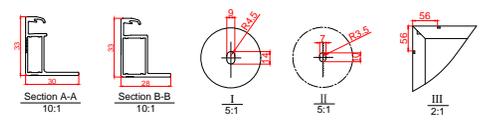
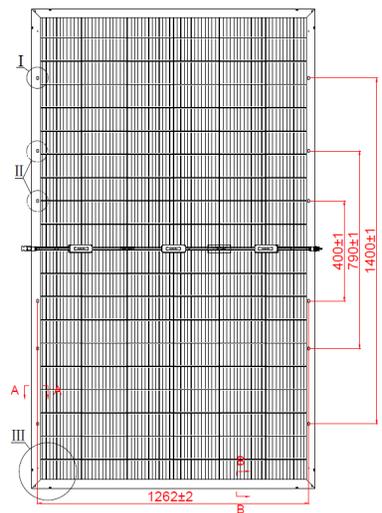
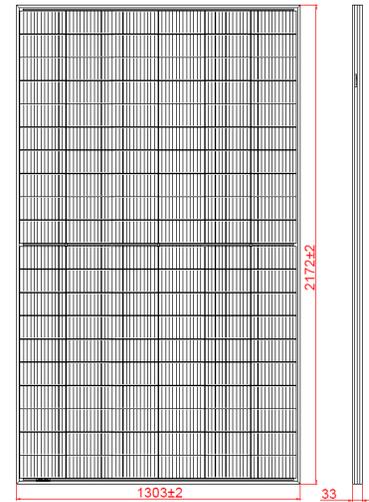
BNPI: Front irradiance 1000W/m², Rear irradiance 135W/m²

Mechanical Specifications

External Dimension	2172 x 1303 x 33 mm
Weight	35.0 kg
Solar Cells	PERC Mono-crystalline 120 pcs(60 x 2)
Front Glass	2.0 mm AR coating heat strengthened glass
Back Glass	2.0 mm heat strengthened glass
Frame	Anodized aluminium alloy
Junction Box	IP68 / 3 diodes
Connector Type	MC4 or others
Cable Type	12 AWG PV Wire(UL)
Cable Length	400 mm(+), 200 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



Temperature Characteristics

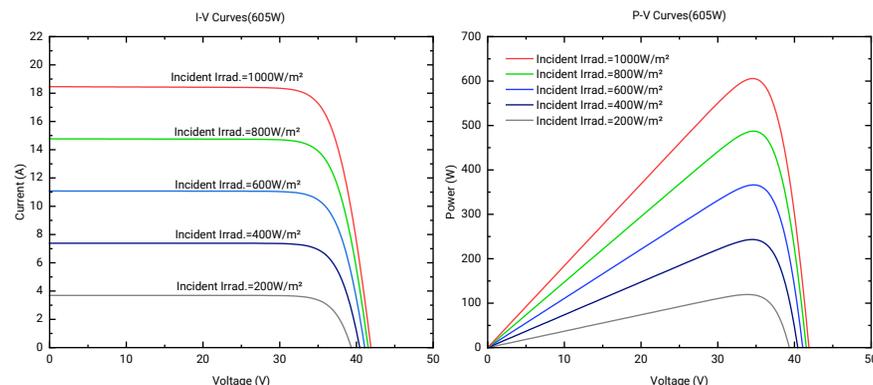
Pmax Temperature Coefficient	-0.35 %/°C
Voc Temperature Coefficient	-0.27 %/°C
Isc Temperature Coefficient	+0.05 %/°C
Operating Temperature	-40~+85 °C
Nominal Operating Cell Temperature (NOCT)	45±2 °C

Packing Configuration

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

*Refer to the SEG container technical documentation for 53' box trailer or other trucks loading quantity

Curves of PV Module



*Refer to SEG installation manual for details