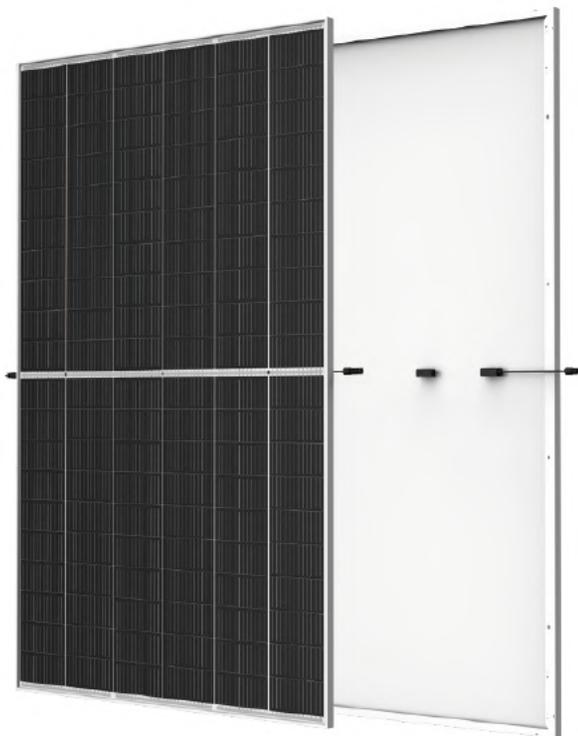




ALPINE Series

Half-Cell Monofacial Module

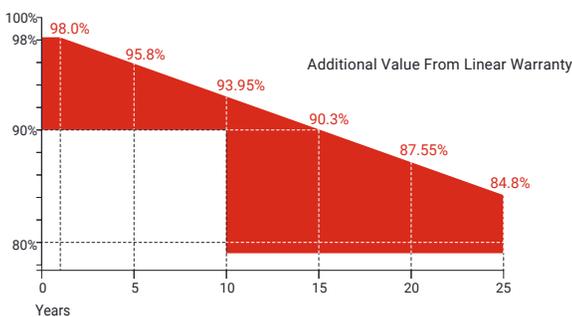
595-610Wp | **21.55%**
 Module Power Output | Max Efficiency



Key Features

-  High module conversion efficiency
-  Better temperature coefficient
-  Super multi busbar technology
-  Low attenuation long warranty
-  Superior load capacity
-  Aesthetic appearance
-  USA based liability insurance
-  Houston, Texas based company

Warranty



15 Years
 Guarantee on product material and workmanship

25 Years
 Linear power output warranty

Product Certification

IEC61215; IEC61730; UL61730					
IEC62804	PID				
IEC61701	Salt Mist				
IEC62716	Ammonia Resistance				
IEC60068	Dust and Sand				
IEC61215	Hailstone				
Fire Type (UL61730): Type 1					
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-HV		SEG-600-BMB-HV		SEG-605-BMB-HV		SEG-610-BMB-HV	
	STC	BNPI	STC	BNPI	STC	BNPI	STC	BNPI
Maximum Power -Pmp(Wp)*	595	446	600	450	605	454	610	458
Open Circuit Voltage -Voc(V)	41.49	39.42	41.69	39.61	41.89	39.80	42.09	39.99
Short Circuit Current -Isc(A)	18.34	14.67	18.40	14.72	18.46	14.77	18.52	14.82
Maximum Power Voltage -Vmp(V)	34.38	32.22	34.58	32.40	34.78	32.58	34.98	32.75
Maximum Power Current -Imp(A)	17.31	13.85	17.36	13.89	17.41	13.93	17.46	13.97
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					30 A			

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%

Mechanical Specifications

External Dimension	2172 x 1303 x 35 mm
Weight	31.0 kg
Solar Cells	PERC Mono-crystalline 120 pcs(60 x 2)
Front Glass	3.2 mm AR coating tempered 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

Temperature Characteristics

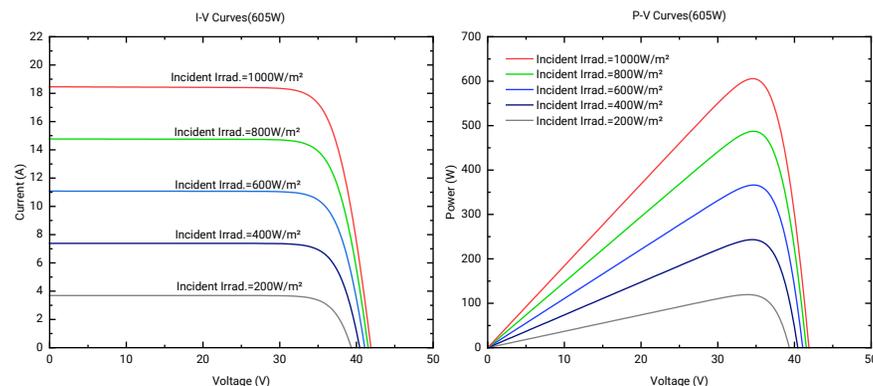
Pmax Temperature Coefficient	-0.35 %/°C
Voc Temperature Coefficient	-0.27 %/°C
Isc Temperature Coefficient	+0.05 %/°C
Operating Temperature	-40~+85 °C
Nominal Operating Cell Temperature (NOCT)	45±2 °C

Packing Configuration

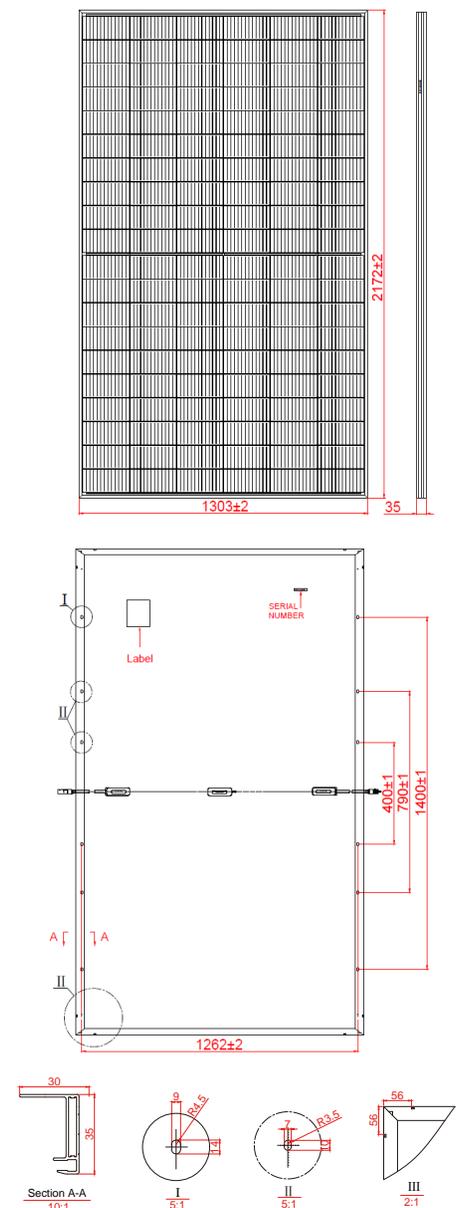
Container*	40'HQ
Pieces per Pallet	31
Pallets per Container	18
Pieces per Container	558

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

Curves of PV Module



Technical Drawing



*Refer to SEG installation manual for details