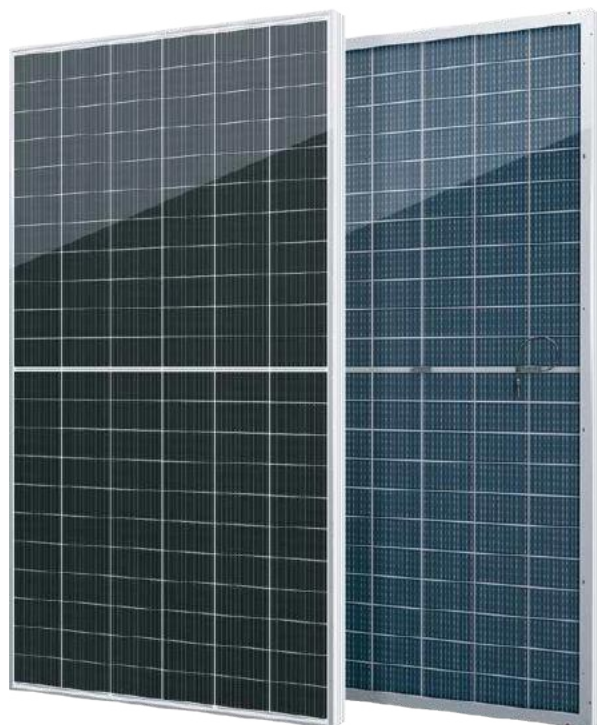




# ALPINE N Series

Half-Cell N-Type Bifacial Module

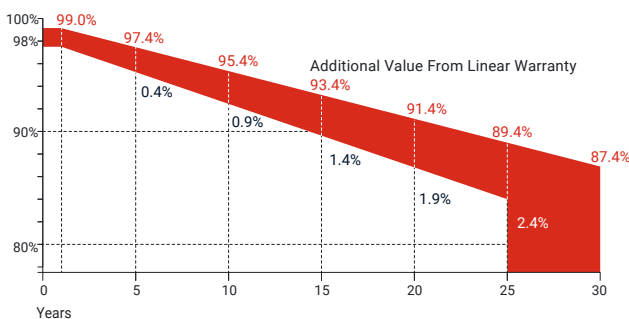
**610-625Wp** | **23.14%**  
Module Power Output | Max Efficiency



## 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 2023, SEG has shipped over 5 GW of solar modules worldwide. The company is expected to exceed a production capacity of 5.5 GW by the end of 2024.



Download Datasheet

## Electrical Characteristics

Module Type	SEG-610-BTC-BG			SEG-615-BTC-BG			SEG-620-BTC-BG			SEG-625-BTC-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)*	610	459	488	615	462	492	620	466	496	625	470	500
Open Circuit Voltage -Voc(V)	48.60	46.17	48.58	48.80	46.36	48.68	49.00	46.55	48.98	49.20	46.74	49.18
Short Circuit Current -Isc(A)	16.00	12.65	12.65	16.06	12.73	12.73	16.13	12.82	12.82	16.19	12.87	12.87
Maximum Power Voltage -Vmp(V)	40.46	38.44	40.44	40.60	38.57	40.58	40.74	38.70	40.72	40.88	38.84	40.86
Maximum Power Current -Imp(A)	15.08	11.94	12.08	15.15	11.98	12.12	15.22	12.04	12.18	15.29	12.10	12.24
Module Efficiency(%)	22.58			22.77			22.95			23.14		
Power Tolerance(W)							(0, +4.99)					
Maximum System Voltage							1500V DC					
Maximum Series Fuse Rating							35 A					
Bifaciality							80±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	2382 x 1134 x 30 mm
Weight	33.1 kg
Solar Cells	N-Type Mono 132pcs(66 x 2)
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 or 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

## Temperature Characteristics

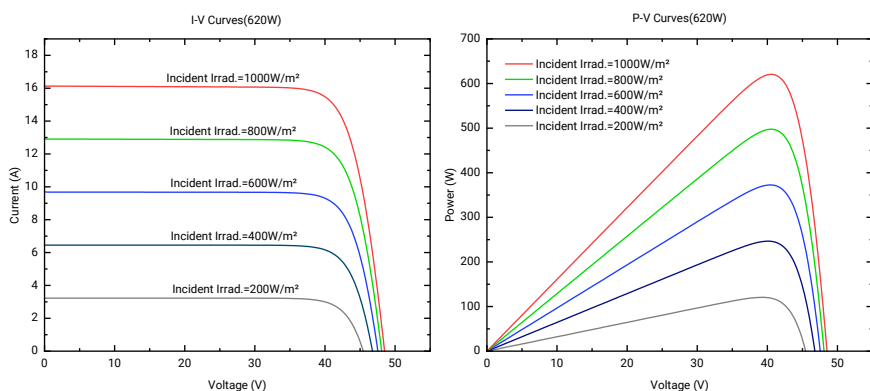
Pmax Temperature Coefficient	-0.30 %/°C
Voc Temperature Coefficient	-0.25 %/°C
Isc Temperature Coefficient	+0.046 %/°C
Operating Temperature	-40~+85 °C
Nominal Operating Cell Temperature (NOCT)	45±2 °C

## Packing Configuration

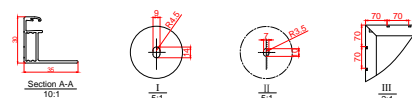
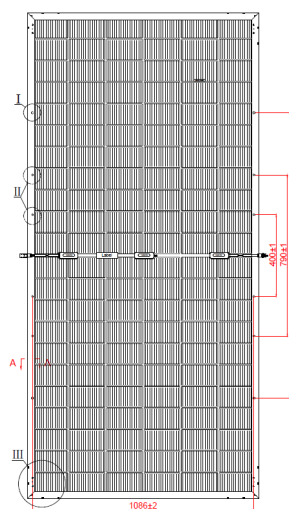
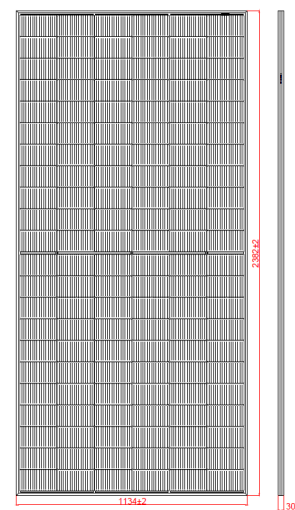
Container*	40'HQ	40'HQ (For USA)
Pieces per Pallet	36	36
Pallets per Container	20	16
Pieces per Container	720	576

\*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