

# ALPINE N Series

Half-Cell N-Type TOPCon  
Bifacial Module

**685-700Wp** | **22.53%**  
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

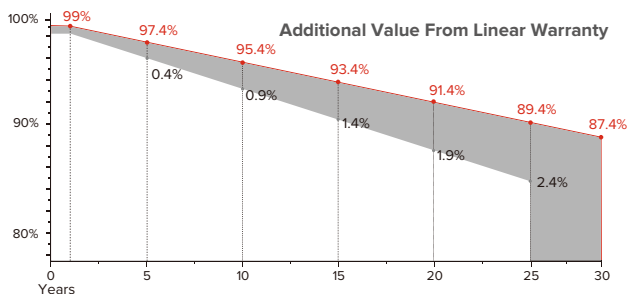


USA based liability insurance.



Houston, Texas based company.

## Warranty



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

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

## Product Certification

IEC61215:2016; 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-685-BTC-BG			SEG-690-BTC-BG			SEG-695-BTC-BG			SEG-700-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)*	685	518	548	690	522	552	695	526	556	700	529	560
Open Circuit Voltage -Voc(V)	47.30	44.80	47.28	47.50	45.00	47.48	47.70	45.20	47.68	47.90	45.40	47.88
Short Circuit Current -Isc(A)	18.34	14.79	14.79	18.39	14.83	14.83	18.44	14.87	14.87	18.49	14.91	14.91
Maximum Power Voltage -Vmp(V)	39.40	37.20	39.38	39.60	37.40	39.58	39.80	37.60	39.78	40.00	37.80	39.98
Maximum Power Current -Imp(A)	17.39	13.91	13.91	17.43	13.94	13.94	17.47	13.97	13.97	17.51	14.00	14.00
Module Efficiency(%)	22.05			22.21			22.37			22.53		
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

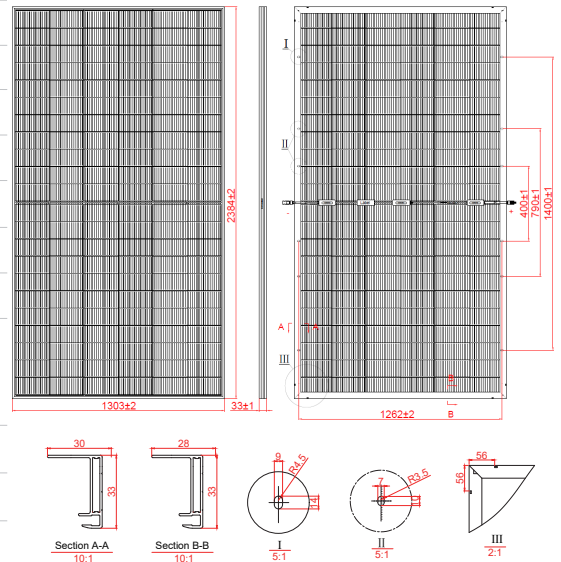
\*Measuring tolerance: ±3%

## Mechanical Specifications

External Dimension	2384 x 1303 x 33mm
Weight	38.5 kg
Solar Cells	N-TOPCon 210 x 105mm(132 pcs)
Front /Back Glass	2.0 mm AR coating semi-tempered glass /low iron
Frame	Anodized aluminium alloy
Junction Box	IP68 / 3 diodes
Connector Type	PV-CO02-xy
Cable Type Cable Length	12 AWG PV Wire (UL) 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

## 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

## I-V Curve

