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ALPINE N Series

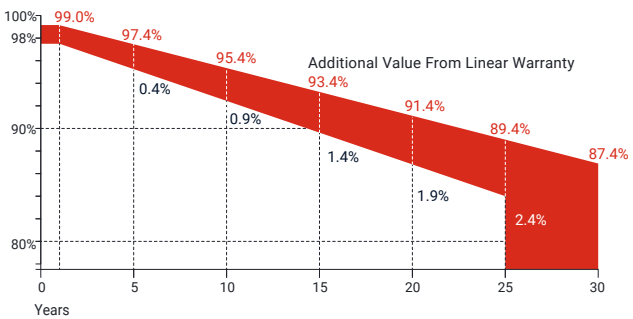
Half-Cell N-Type Bifacial Module

615-635Wp Module Power Output | **23.51%** 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	

Intertek · PV CYCLE · CE · TÜV SÜD · DEKRA · CALIFORNIA ENERGY COMMISSION · FSEC

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

ALPINE N Series SEG-XXX-BTC-BG 132Cells

Electrical Characteristics

Module Type	SEG-615-BTC-BG			SEG-620-BTC-BG			SEG-625-BTC-BG			SEG-630-BTC-BG			SEG-635-BTC-BG		
	STC	NOCT	BNPI	STC	NOCT	BNPI	STC	NOCT	BNPI	STC	NOCT	BNPI	STC	NOCT	BNPI
Maximum Power -Pmp(Wp)*	615	462	681	620	466	687	625	470	693	630	474	698	635	478	704
Open Circuit Voltage -Voc(V)	48.80	46.36	48.80	49.00	46.55	49.00	49.20	46.74	49.20	49.40	46.96	49.40	49.60	47.17	49.60
Short Circuit Current -Isc(A)	16.06	12.73	17.79	16.13	12.82	17.87	16.19	12.87	17.94	16.25	12.92	18.01	16.31	12.97	18.07
Maximum Power Voltage -Vmp(V)	40.60	38.57	40.60	40.74	38.70	40.74	40.88	38.84	40.88	41.04	38.98	41.04	41.18	39.12	41.18
Maximum Power Current -Imp(A)	15.15	11.98	16.79	15.22	12.04	16.86	15.29	12.10	16.94	15.35	12.16	17.01	15.42	12.22	17.09
Module Efficiency(%)		22.77			22.95			23.14			23.32			23.51	
Power Tolerance(W)	(0, +4.99)														
Maximum System Voltage	1500V DC														
Maximum Series Fuse Rating	35 A														
Bifaciality	80±10%														

STC: Irradiance 1000 W/m² module temperature 25°C AM=1.5
*Measuring tolerance: ±3%

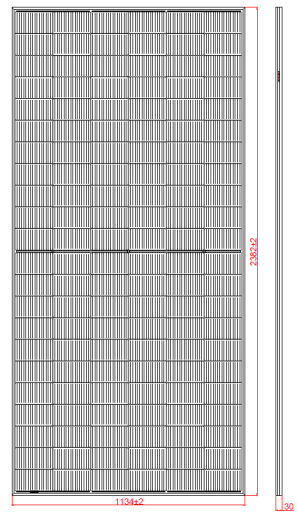
NOCT: Irradiance 800W/m² ambient temperature 20°C module temperature 45°C wind speed: 1m/s
BNPI: Front irradiance 1000W/m², Rear irradiance 135W/m²

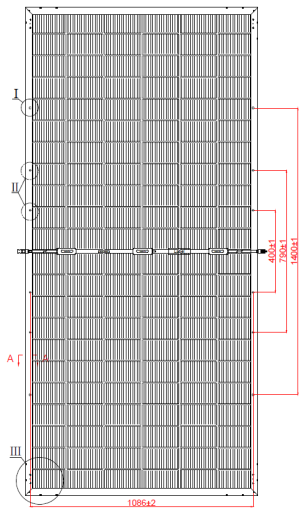
Mechanical Specifications

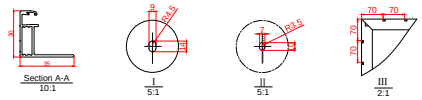
External Dimension	2382 x 1134 x 30 mm
Weight	33.1 kg
Solar Cells	N-Type Mono-crystalline 132pcs(66 x 2)
Front Glass	2.0 mm AR coating heat strengthened glass
Back Glass	2.0 mm heat strengthened glass
Frame	Anodized aluminium alloy
Junction Box	IP68 / 3 diodes
Connector Type	MC4 or others
Cable Type	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







*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)	53' Trailer*
Pieces per Pallet	36	36	36
Pallets per Container	20	16	16
Pieces per Container	720	576	576

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

Curves of PV Module