

SIII SERIES

Multiple upgrades were forged into one

445-460W



● SIII SERIES

SEG Solar INC. (SEG) redefined the high-efficiency module series by integrating 166mm silicon wafers with multi-busbar and half-cut cell technologies. SEG panel combined creative technology effectively and extremely improved the module efficiency and power output.

● KEY FEATURES

- Less mismatch to get more power
- Less power loss by minimizing the shading impact
- Competitive low light performance
- 3 times EL test to ensure best quality
- Ideal choice for utility and commercial scale projects by reduced BoS and improved ROI
- Outstanding reliability proven by PVEL for stringent environment condition:
 - Sand, acid, salt and hailstones
 - Anti-PID

● PRODUCT CERTIFICATION

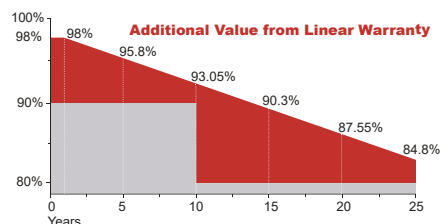
IEC61215:2016; IEC 61730:2016; UL1703; UL61730/CSA/CEC	
IEC62804	PID
IEC61701	Salt Mist
IEC62716	Ammonia Resistance
IEC60068	Dust and Sand
IEC61215	Hailstone(25mm)
Fire Type (UL61730):1/29 (Type1-HV Type29-BG)	
ISO14001:2015; ISO9001:2015; ISO45001:2018	



● INSURANCE

PICC

● WARRANTY



15 YEARS Guarantee on product material and workmanship

25 YEARS Linear power output warranty



Electrical Characteristics

Module Type	SEG-445-BMA-HV		SEG-450-BMA-HV		SEG-455-BMA-HV		SEG-460-BMA-HV	
	STC	NOCT	STC	NOCT	STC	NOCT	STC	NOCT
Maximum Power at STC (Pmp)	445	334	450	338	455	342	460	346
Open Circuit Voltage (Voc)	49.9	46.6	50.1	46.8	50.3	46.9	50.5	47.1
Short Circuit Current (Isc)	11.34	9.17	11.41	9.22	11.48	9.29	11.55	9.34
Maximum Power Voltage (Vmp)	41.6	38.5	41.8	38.7	42.0	38.9	42.2	39.1
Maximum Power Current (Imp)	10.70	8.68	10.77	8.73	10.84	8.80	10.91	8.85
Module Efficiency at STC(η_m)	20.47		20.70		20.93		21.16	
Power Tolerance	(0, +3%)							
Maximum System Voltage	1500V DC							
Maximum Series Fuse Rating	20 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

Power measurement tolerance: +/-3%

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

Mechanical Specifications

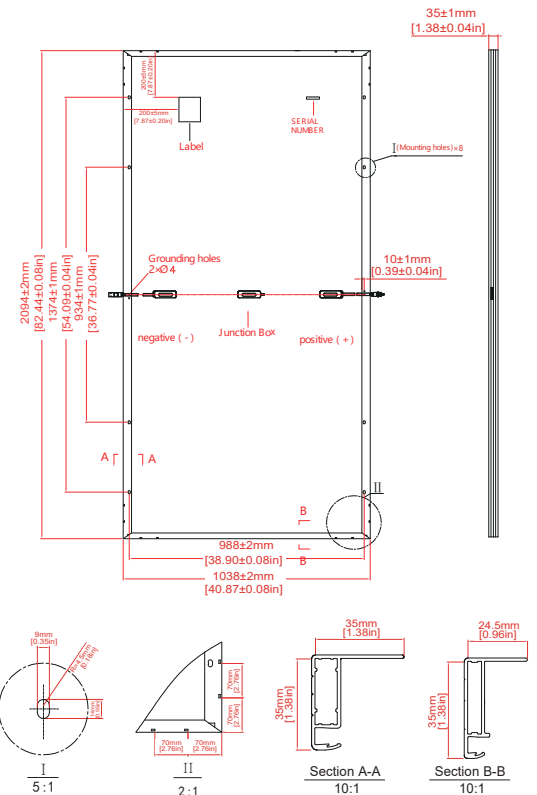
External Dimensions	2094 x 1038 x 35 mm
Weight	23.5 kg
Solar Cells	PERC Mono 166 x 83 mm (144 pcs)
Front Glass	3.2 / mm AR coating tempered glass / low iron
Frame	Anodized aluminium alloy
Junction Box	IP68 / 3 diodes
Connector Type	MC4
Cable Type / Length	12 AWG PV Wire (UL) / 1200 mm
Mechanical Load (Front)	5400 Pa / 113 psf*
Mechanical Load (Rear)	3600 Pa / 75 psf*

*Refer to SEG installation Manual for details

Packing Configuration

	2094 x 1038 x 35 mm	
Container	20'GP	40'HQ
Pieces per Pallet	31	31
Pallets per Container	5	22
Pieces per Container	155	682

For details, please consult SEG.



*Refer to SEG installation Manual for details

I-V Curve

