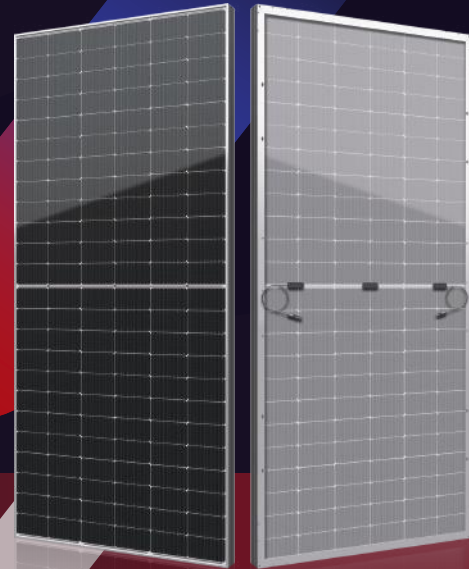


SIV SERIES

Small Changes, Big Accomplishments

540-555W



● SIV SERIES

SEG Solar INC. (SEG) redefined the high-efficiency module series by integrating 182mm 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

- The transmittance of 400~1100nm band in the transparent region is $\geq 90\%$
- Using POE or EVA package, there is no need to worry about component power attenuation caused by PID
- A transparent backsheet reduces module weight by 30%, resulting in reduced shipping and installation costs
- Through ultraviolet 500kWh/m² strict test, fully meet the requirements of 25 years of use of the modules
- Timely release of packaging material decomposition of acetic acid, effectively reduce the concentration of acetic acid modules
- PVEL Consistent with conventional component production process, no need to modify production equipment

● PRODUCT CERTIFICATION

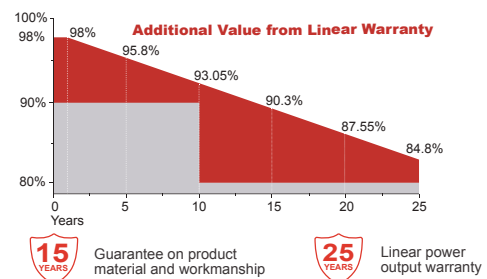
IEC61215:2016; IEC 61730:2016; UL1703; UL61730/CSA/CEC	
IEC62804	PID
IEC61701	Salt Mist
IEC62716	Ammonia Resistance
IEC60068	Dust and Sand
IEC61215	Hailstone(25mm)
Fire Type (UL61730):1/29 (Type1-HV Type29-BG)	
ISO14001:2015; ISO9001:2015; ISO45001:2018	



● INSURANCE



● WARRANTY



Mechanical Specifications

External Dimension	2278 x 1134 x 35 mm
Weight	27.0 kg
Solar Cells	PERC Mono crystalline(144 pcs)
Front Glass	3.2 / mm AR coating semi-tempered glass / low iron
Backsheet	Transparent backsheet
Frame	Anodized aluminium alloy
Junction Box	IP68 / 3 diodes
Connector Type	MC4 Compatible
Cable Type / Length	12 AWG PV Wire (UL/IEC)/ 1200 mm
Mechanical Load(Front)	5400 Pa / 113 psf*
Mechanical Load(Rear)	3600 Pa / 75 psf*

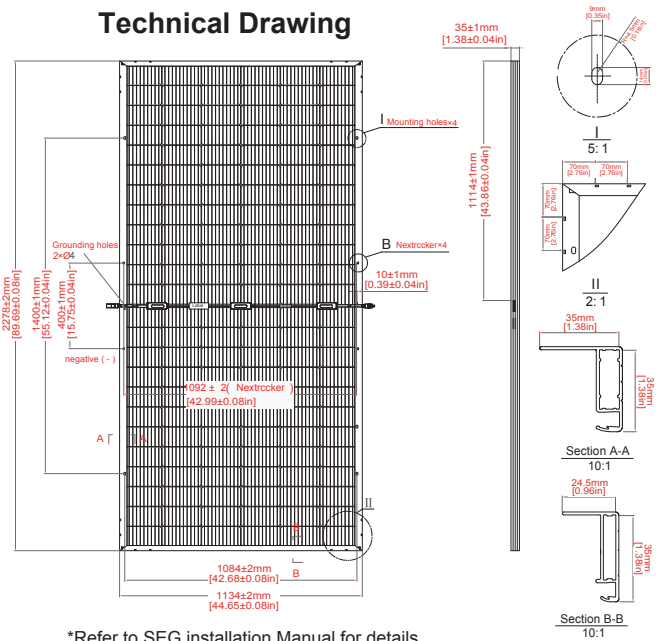
*Refer to SEG installation Manual for details

Packing Configuration

Container	20'GP	40'HQ
Pieces per Pallet	31	31
Pallets per Container	4	20
Pieces per Container	124	620

For details, please consult SEG.

Technical Drawing



*Refer to SEG installation Manual for details

Electrical Characteristics

Module Type	SEG-540-BMA-TB			SEG-545-BMA-TB			SEG-550-BMA-TB			SEG-555-BMA-TB		
	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 -P _{mp} (W)	540	406	378	545	409	382	550	414	385	555	418	389
Open Circuit Voltage -V _{oc} (V)	49.50	46.18	49.48	49.60	46.32	49.58	49.70	46.40	49.68	49.80	46.47	49.78
Short Circuit Current -I _{sc} (A)	13.81	11.16	9.74	13.90	11.23	9.80	14.00	11.32	9.87	14.10	11.40	9.94
Maximum Power Voltage -V _{mp} (V)	41.55	38.39	41.61	41.80	38.41	41.86	42.05	38.58	42.10	42.31	38.75	42.35
Maximum Power Current -I _{mp} (A)	13.00	10.59	9.09	13.04	10.65	9.13	13.08	10.73	9.15	13.12	10.79	9.19
Module Efficiency STC-η _m (%)	20.90			21.10			21.29			21.48		
Power Tolerance (W)							(0, +3%)					
Pmax Temperature Coefficient							-0.35 %/°C					
Voc Temperature Coefficient							-0.27 %/°C					
Isc Temperature Coefficient							+0.05 %/°C					

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%

Rear Side Power Gain(SEG-540-BMA-TB)

Power Gain	10%	15%	20%	25%	30%
Maximum Power -P _{mp} (W)	594	621	648	675	702
Open Circuit Voltage -V _{oc} (V)	49.50	49.50	49.50	49.50	49.50
Short Circuit Current -I _{sc} (A)	15.19	15.88	16.57	17.26	17.95
Maximum Power Voltage -V _{mp} (V)	41.55	41.55	41.55	41.55	41.55
Maximum Power Current -I _{mp} (A)	14.30	14.95	15.60	16.25	16.90

Application Conditions

Maximum System Voltage	1500V DC
Maximum Series Fuse Rating	25 A
Operating Temperature	-40~+85 °C
Nominal Operating Cell Temperature	45±2 °C
Bifaciality	70%±10%

I-V Curve

