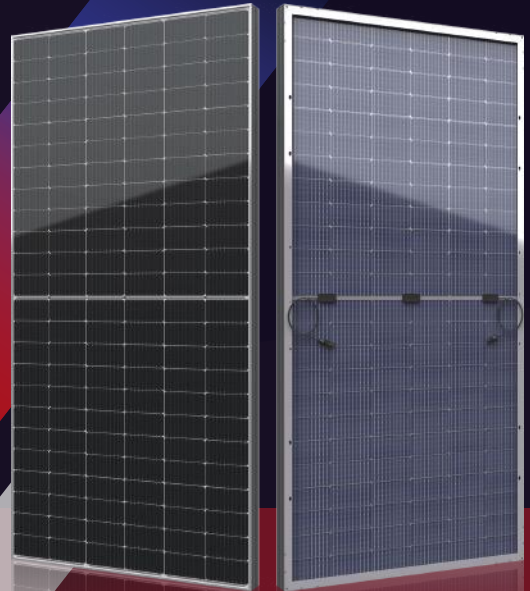


SIV SERIES

Small Changes, Big Accomplishments

535-550W



● 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

- 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

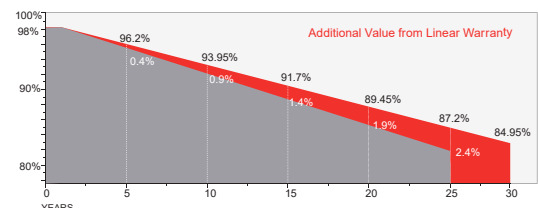
| | |
|--|--------------------|
| IEC61215:2016; IEC 61730:2016; UL1703; UL61730/CSA/CEC | |
| IEC62804 | PID |
| IEC61701 | Salt Mist |
| IEC62716 | Ammonia Resistance |
| IEC60068 | Dust and Sand |
| IEC61215 | Hailstone(25mm) |
| Fire Type (UL61730):1/29 (Type1-HV Type29-BG) | |
| ISO14001:2015; ISO9001:2015;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



● INSURANCE



● WARRANTY



Guarantee on product material and workmanship



Linear power output warranty



Mechanical Specifications

| | |
|------------------------|--|
| External Dimension | 2278 x 1134 x 30 mm |
| Weight | 32 kg |
| Solar Cells | PERC Mono crystalline(144 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 | 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* |

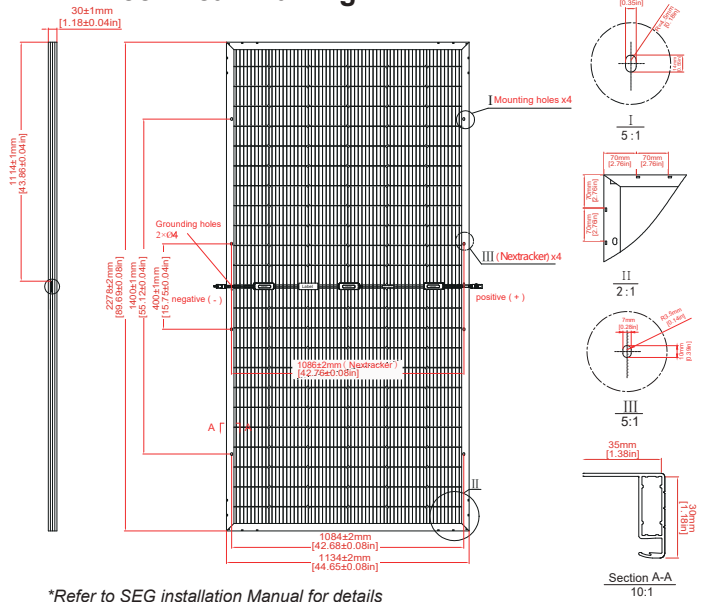
*Refer to SEG installation Manual for details

Packing Configuration

| | | |
|-----------------------|-------|-------|
| Container | 20'GP | 40'HQ |
| Pieces per Pallet | 32 | 32 |
| Pallets per Container | 4 | 20 |
| Pieces per Container | 128 | 640 |

For details, please consult SEG.

Technical Drawing



*Refer to SEG installation Manual for details

Electrical Characteristics

| Module Type | SEG-535-BMA-BG | | | SEG-540-BMA-BG | | | SEG-545-BMA-BG | | | SEG-550-BMA-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 -P _{mp} (W) | 535 | 402 | 375 | 540 | 406 | 378 | 545 | 409 | 382 | 550 | 414 | 385 |
| Open Circuit Voltage -V _{oc} (V) | 49.40 | 46.09 | 49.38 | 49.50 | 46.18 | 49.48 | 49.60 | 46.32 | 49.58 | 49.70 | 46.40 | 49.68 |
| Short Circuit Current -I _{sc} (A) | 13.70 | 11.08 | 9.66 | 13.81 | 11.16 | 9.74 | 13.90 | 11.23 | 9.80 | 14.00 | 11.32 | 9.87 |
| Maximum Power Voltage -V _{mp} (V) | 41.29 | 38.33 | 41.35 | 41.55 | 38.39 | 41.61 | 41.80 | 38.41 | 41.86 | 42.05 | 38.58 | 42.10 |
| Maximum Power Current -I _{mp} (A) | 12.96 | 10.50 | 9.07 | 13.00 | 10.59 | 9.09 | 13.04 | 10.65 | 9.13 | 13.08 | 10.73 | 9.15 |
| Module Efficiency STC-η _m (%) | 20.71 | | | 20.90 | | | 21.10 | | | 21.29 | | |
| 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-BG)

| | | | | | |
|--|-------|-------|-------|-------|-------|
| 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

