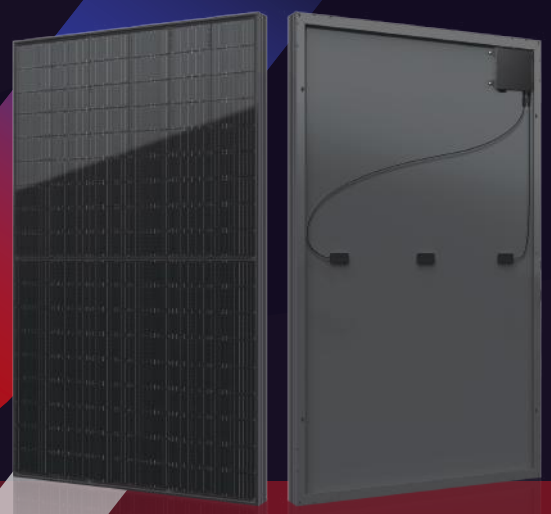
SIV AC MODULE SERIES

Small Changes, Big Accomplishments

405-420W



SIV AC MODULE SERIES

SEG Solar INC. (SEG) redefined the high-efficiency AC module series by integrating 182 mm silicon wafers with multi-busbar, half-cut cell and Micro inverter technology, SEG panel combined creative technology effectively and extremely improved the AC 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
- PVEL — Outstanding reliability proven by PVEL for stringent environment condition:
  - Sand, acid, salt and hailstones
  - Anti-PID

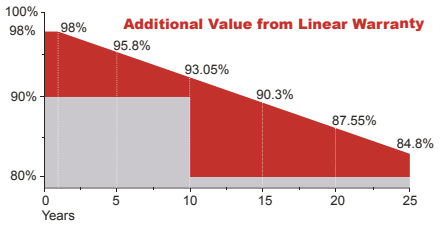
PRODUCT CERTIFICATION

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



25 YEARS Guarantee on product material and workmanship

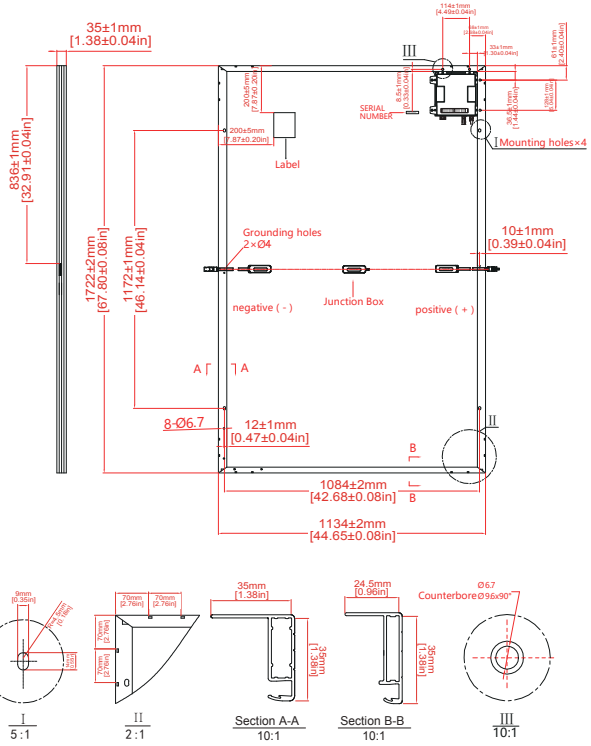
25 YEARS Linear power output warranty

SEG SOLAR INC. (SEG)
SEG Headquarter California office: 6200 Stoneridge Mall Rd., Ste 300 Pleasanton, CA 94588
SEG San Antonio, Texas office: 973 Isom Road San Antonio, TX 78216
Tel: 925-468-4198 Web: www.segsolar.com

DC Electrical Characteristics

Module Type	SEG-405-BMD-HV		SEG-410-BMD-HV		SEG-415-BMD-HV		SEG-420-BMD-HV	
	STC	NOCT	STC	NOCT	STC	NOCT	STC	NOCT
Maximum Power at STC (Pmp)	405	304	410	308	415	311	420	315
Open Circuit Voltage (Voc)	37.22	34.73	37.32	34.81	37.42	34.90	37.52	34.99
Short Circuit Current (Isc)	13.70	11.07	13.80	11.15	13.90	11.23	14.00	11.32
Maximum Power Voltage (Vmp)	30.93	28.91	31.05	29.05	31.16	29.19	31.28	29.33
Maximum Power Current (Imp)	13.10	10.51	13.21	10.59	13.32	10.66	13.43	10.74
Module Efficiency at STC(ηm)	20.74		21.00		21.25		21.51	
Power Tolerance	(0, +3%)							
Maximum System Voltage	1500V DC							
Maximum Series Fuse Rating	25 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%



**Refer to SEG installation Manual for details*

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	1722 x 1134 x 35 mm
Weight	21.5 kg
Solar Cells	PERC Mono (108 pcs)
Front Glass	3.2 / mm AR coating tempered glass / low iron
Frame	Black anodized aluminium alloy
Junction Box	IP68 / 3 diodes
Connector Type	MC4
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

	1722 x 1134 x 35 mm	
Container	20'GP	40'HQ
Pieces per Pallet	31	31
Pallets per Container	6	26
Pieces per Container	186	806

For details, please consult SEG.

DC input

Recommended Max PV Power (Wp)	450
Max DC Open Circuit Voltage (Vdc)	60
Max DC Input Current (Adc)	14
MPPT Tracking Accuracy	>99.5%
MPPT Tracking Range (Vdc)	22-55
Isc PV (absolute maximum) (Adc)	18
Maximum Inverter Backfeed Current to the Array (Adc)	0

AC output

Peak AC Output Power (Wp)	300		
Rated AC Output Power (Wp)	250		
Nominal Power Grid Voltage (Vac)	240	208	230
Allowable Power Grid Voltage (Vac)	211V-264*	183V-229*	configurable*
Allowable Power Grid Frequency (Hz)	59.3 a 60.5*		configurable*
THD	<3% (at rated power)		
Power Factor (cos phi,fixed)	>0.99 (at rated power)		
Rated Output Current (Aac)	1.04	1.2	1.09
Current (inrush)(Peak and Duration)	12A,15us		
Nominal Frequency (Hz)	60		50
Maximum Output Fault Current (Aac)	2.2A peak		
Maximum Output Overcurrent Protection (Aac)	6.3		
Maximum Number of Units Per Branch (20A) (All NEC ajdustment factors have been considered)	15	13	14

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