

SEM 300W/305W/310W/315W/320W



- Excellent module efficiency - up to 19.67%
- Positive power tolerance 0/+5W
- Bankable module
- PID free
- Advanced surface texturing
- Resistance to sand and dust abrasion
- Safety for salt mist and ammonia corrosion
- Safety for fire risk
- Outstanding power output capability at low irradiance
- Triple 100% EL tests
- 3800 Pa wind load and 5400 Pa snow load (900 kg snow load per module); 35 mm hail stones at 97 km/h

Certificates

CE-Compliant, IEC 61215-1 (ed.1), IEC 61215-1-1 (ed.1), IEC 61215-2 (ed.1), IEC 61730-1 (ed.2), IEC 61730-2 (ed.2), application class A, Safety Class II, UL 1703



Warranty

15 Years: Manufacturing Warranty
 12 Years Warranty: 90% Power Output
 25 Years Warranty: 80% Power Output

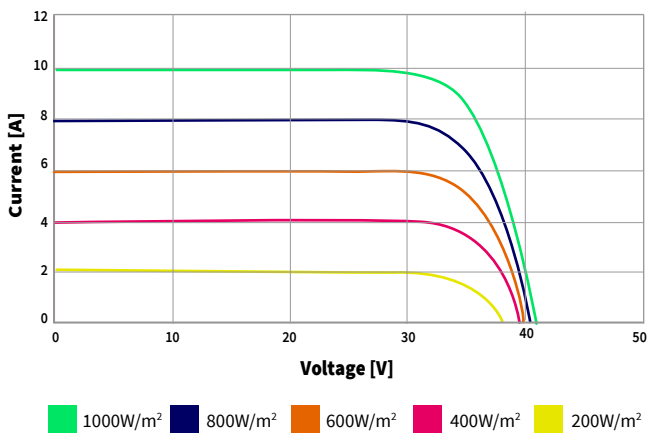
Mechanical Characteristics

Solar Cells	Mono-crystalline silicon
No. of Cells	60 (6 × 10)
Module Dimensions	1640 × 992 × 35 mm
Weight	18.5 kg
Front Glass	3.2 mm high transmittance, reinforced glass
Backsheet	Anti-aging film
Frame	Anodized aluminum alloy
Junction Box	IP67
Output Cables	4.0 mm ² PV special cable
Connectors	MC4 compatible

Electrical Characteristics

Model	SEM 300	SEM 305	SEM 310	SEM 315	SEM 320
Performance at Standard Test Conditions (STC): 1000 W/m², 25°C, AM 1.5					
Maximum Power (Pmax)	300 W	305 W	310 W	315 W	320 W
Operating Voltage (Vmpp)	32.65 V	32.91 V	33.25 V	33.55 V	33.87 V
Operating Current (Impp)	9.20 A	9.27 A	9.33 A	9.39 V	9.45 V
Open-Circuit Voltage (Voc)	39.84 V	40.15 V	40.63 V	40.91 V	41.30 V
Short-Circuit Current (Isc)	9.72 A	9.79 A	9.85 A	9.91 A	9.97 A
Module Efficiency	18,44%	18,75%	19,05%	19,36%	19,67%
Performance at Nominal Operating Cell Temperature (NOCT) : 800 W/m², 20°C, AM 1.5, wind speed 1m/s					
Maximum Power (Pmax)	222 W	226 W	229 W	232 W	235 W
Operating Voltage (Vmpp)	30.12 V	30.42 V	30.66 V	30.90 V	31.14 V
Operating Current (Impp)	7.38 A	7.43 A	7.47 A	7.51 A	7.55 A
Open-Circuit Voltage (Voc)	37.21 V	37.62 V	37.85 V	38.13 V	38.40 V
Short-Circuit Current (Isc)	7.75 A	7.80 A	7.85 A	7.90 A	7.95 A
Power Tolerance				0 / +5 W	
Maximum System Voltage				1000 V	
Temperature Characteristics					
Temp. Coefficient at Pmax				- 0.393 % / °C	
Temp. Coefficient at Voc				- 0.31 % / °C	
Temp. Coefficient at Isc				0.041% / °C	
Nominal Operating Cell Temp.				45 ± 2 °C	
Operating Temp.				-40 °C to 85 °C	

Current-Voltage Curve (315W)



Power-Voltage Curve (315 W)

