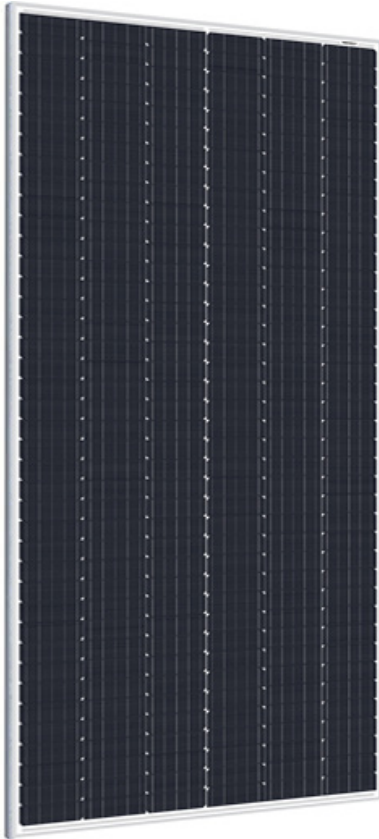


SEM 380/385/390/395/400/405/410/415/420 W Diamond



- Excellent efficiency – up to 20.11%
- Improved reliability and durability
- 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
- 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

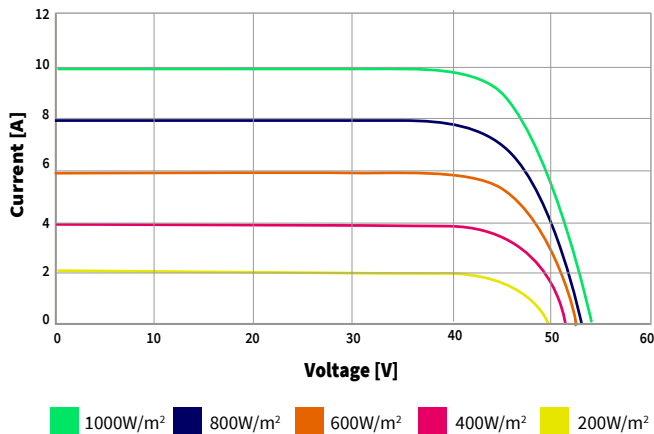
Mechanical Characteristics

Solar Cells	Mono-crystalline silicon
Module Dimensions	2125 × 983 × 40 mm
Weight	23.5 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

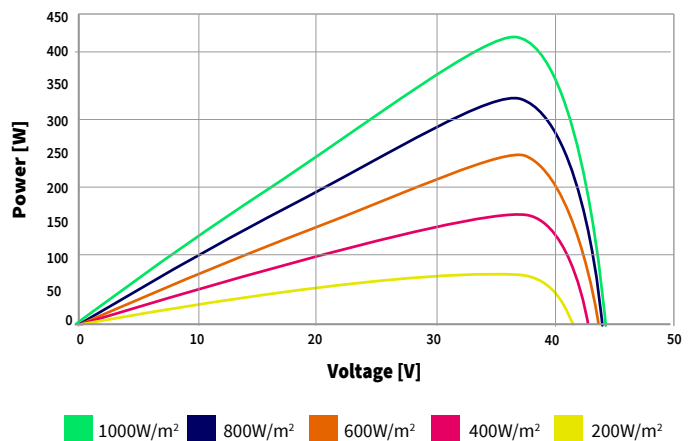
Electrical Characteristics

Model	SEM 380 Diamond	SEM 385 Diamond	SEM 390 Diamond	SEM 395 Diamond
Performance at Standard Test Conditions (STC): 1000 W/m², 25°C, AM 1.5				
Maximum Power (Pmax)	380 W	385 W	390 W	395 W
Operating Voltage (Vmpp)	43.74 V	43.91 V	44.08 V	44.24 V
Operating Current (Impp)	8.69 A	8.77 A	8.85 A	8.93 V
Open-Circuit Voltage (Voc)	52.24 V	52.46 V	52.68 V	52.90 V
Short-Circuit Current (Isc)	9.13 A	9.21 A	9.29 A	9.37 A
Module Efficiency	18,19%	18,43%	18,67%	18,91%
Performance at Nominal Module Operating Temperature (NMOT)				
Maximum Power (Pmax)	282 W	286 W	290 W	294 W
Operating Voltage (Vmpp)	40.03 V	40.06 V	40.10 V	40.14 V
Operating Current (Impp)	7.07 A	7.15 A	7.25 A	7.35 A
Open-Circuit Voltage (Voc)	48.85 V	48.88 V	48.93 V	48.98 V
Short-Circuit Current (Isc)	7.53 A	7.60 A	7.68 A	7.76 A
Power Tolerance	0 / +5 W			
Maximum System Voltage	1000 V			
Temperature Characteristics				
Temp. Coefficient at Pmax	- 0.308 % / °C			
Temp. Coefficient at Voc	- 0.243 % / °C			
Temp. Coefficient at Isc	0.047% / °C			
Nominal Operating Cell Temp.	42 ± 3 °C			
Operating Temp.	-40 °C to 85 °C			

Current-Voltage Curve (420W)



Power-Voltage Curve (420W)



Electrical Characteristics

Model	SEM 400 Diamond	SEM 405 Diamond	SEM 410 Diamond	SEM 415 Diamond	SEM 420 Diamond
Performance at Standard Test Conditions (STC): 1000 W/m², 25°C, AM 1.5					
Maximum Power (Pmax)	400 W	405 W	410 W	415 W	420 W
Operating Voltage (Vmpp)	44.41 V	44.56 V	44.72 V	44.87 V	45.03 V
Operating Current (Impp)	9.01 V	9.09 V	9.17 V	9.25 V	9.33 V
Open-Circuit Voltage (Voc)	53.10 V	53.25 V	53.45 V	53.62 V	53.82 V
Short-Circuit Current (Isc)	9.45 A	9.53 A	9.61 A	9.69 A	9.77 A
Module Efficiency	19,15%	19,39%	19,63%	19,87%	20,11%
Performance at Nominal Module Operating Temperature (NMOT)					
Maximum Power (Pmax)	299 W	303 W	308 W	312 W	315 W
Operating Voltage (Vmpp)	40.18 V	40.22 V	40.26 V	40.26 V	40.26 V
Operating Current (Impp)	7.45 A	7.56 A	7.66 A	7.75 A	7.83 A
Open-Circuit Voltage (Voc)	49.03 V	49.08 V	49.13 V	49.18 V	49.18 V
Short-Circuit Current (Isc)	7.83 A	7.91 A	7.99 A	8.07 A	8.14 A
Power Tolerance			0 / +5 W		
Maximum System Voltage			1000 V		
Temperature Characteristics					
Temp. Coefficient at Pmax			- 0.308 % / °C		
Temp. Coefficient at Voc			- 0.243 % / °C		
Temp. Coefficient at Isc			0.047% / °C		
Nominal Operating Cell Temp.			42 ± 3 °C		
Operating Temp.			-40 °C to 85 °C		