

Samsung takes on the Solar Challenge

Developing viable solar power systems is one of the great tasks facing the world today, and Samsung is now in the race.

We are poised to repeat our success in solar power generation.

Our track record speaks for itself.

		LPC241SM-08	LPC244SM-08	LPC247SM-08
Performance at Standard Test Conditions (STC) : Irradiance 1000 W/m², AM 1.5, and cell temperature 25°C				
Maximum power	P _{max} (Wp)	241	244	247
Open circuit voltage	V _{oc} (V)	37.4	37.5	37.6
Short circuit current	I _{sc} (A)	8.54	8.58	8.62
Maximum power voltage	V _{mp} (V)	30.1	30.3	30.4
Maximum power current	I _{mp} (A)	8.01	8.07	8.14
Module efficiency		15.06%	15.24%	15.43%
Performance at Nominal Operating Cell Temperature (NOCT) : Irradiance 800 W/m², ambient temperature 20°C, wind speed 1m/s				
Maximum power	P _{max} (Wp)	194	196	198
Open circuit voltage	V _{oc} (V)	37.4	37.3	37.4
Short circuit current	I _{sc} (A)	6.84	6.88	6.89
Maximum power voltage	V _{mp} (V)	30.3	30.4	30.5
Maximum power current	I _{mp} (A)	6.43	6.48	6.49

* The rated power may only vary by 0 Wp / +2.99 Wp.

System integration parameters

Maximum system voltage (IEC)	1,000 VDC
Maximum system voltage (UL)	600 VDC
Maximum series fuse rating	15 A
Maximum reverse current	20 A

Safety Ratings & Warranties

Fire Safety Classification	Class C
Certifications	UL 1703, CEC Listed
Warranty	5 years limited product warranty
Performance guarantee	10 years limited warranty of 90% power output
	25 years limited warranty of 80% power output

Qualification Test

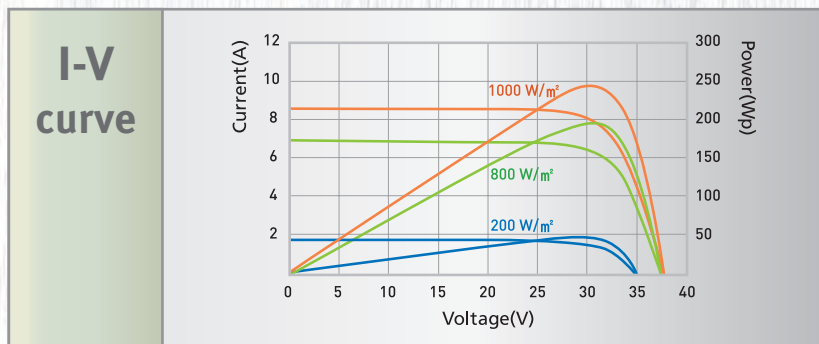
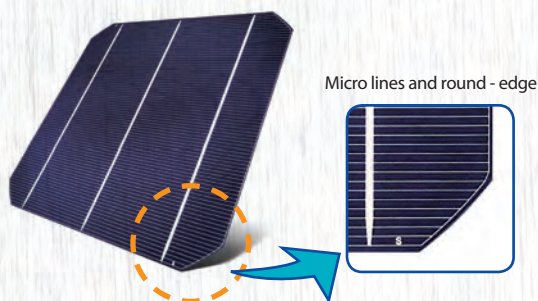
Temp cycling range	-40°C to 85°C for 200 cycles
Damp heat test	85°C and 85% relative humidity for 1000 hr
Front load test (Snow)	5400 Pa
Rear static load test(Wind)	2400 Pa
Hailstone impact test	25 mm hail at 23 m/s from 1 m distance

Temperature coefficients	
NOCT	$46 \pm 2^{\circ}\text{C}$
TC I_{sc}	0.07%/K
TC V_{oc}	-0.35%/K
TC P_{max}	-0.48%/K

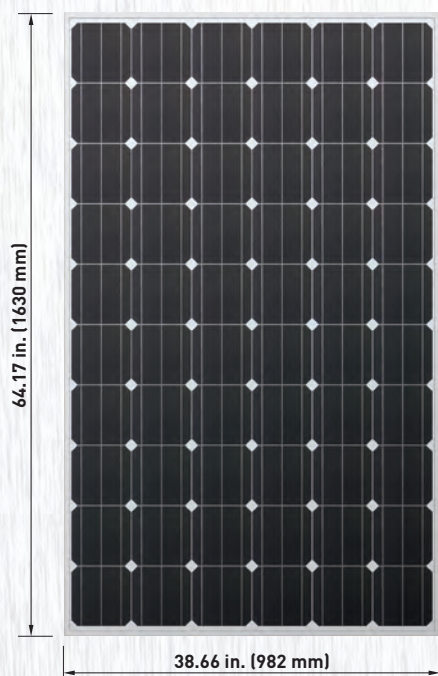
(NOCT : Nominal Operating Cell Temperature)

Packing Configuration	
Container	40'HC
Piece per pallet	20
Pallets per container	26

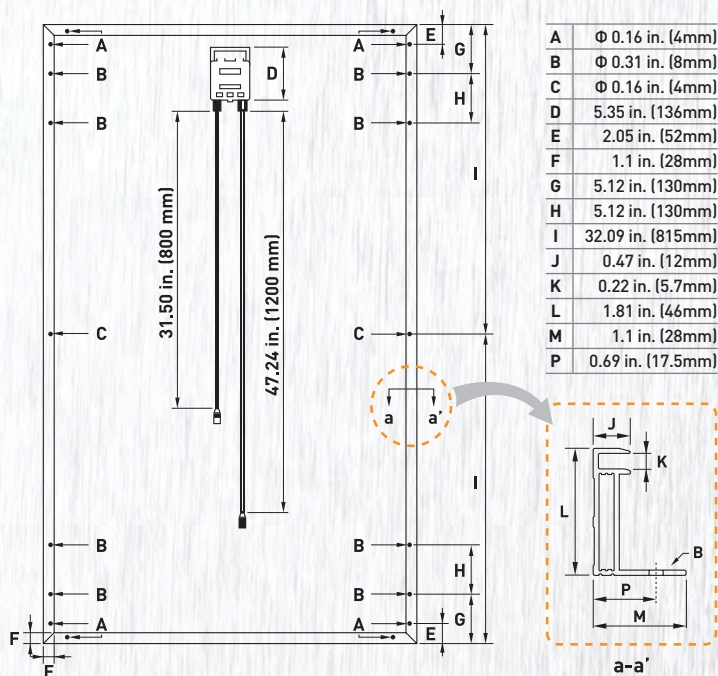
Physical characteristics		
Cells per module	60	
Cell type	Mono-crystalline	
Dimensions	64.17x 38.66x1.81 in. (1630x982x46mm)	
Front Glass	0.13 in.(3.2mm) Tempered glass	
Weight	41 lbs (18.6kg)	
Junction box	Connector Type	Bizlink S418 (MC4 connectable)
	IP Grade	IP 65
	Output Cable	(+) 47.24 in. (-) 31.50 in.



FRONT



REAR



* All data subject to change without prior notice.

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