

# 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.

		LPC244SM	LPC247SM
<b>Performance at Standard Test Conditions (STC) : Irradiance 1000 W/m<sup>2</sup>, AM 1.5, and cell temperature 25 °C</b>			
Maximum power	Pmax (Wp)	244	247
Maximum power voltage	Vmp (V)	30.7	30.8
Maximum power current	Imp (A)	7.97	8.04
Open circuit voltage	Voc (V)	37.6	37.6
Short circuit current	Isc (A)	8.40	8.47
Module efficiency		15.24%	15.43%
<b>Performance at Nominal Operating Cell Temperature (NOCT) : Irradiance 800 W/m<sup>2</sup>, AM 1.5</b>			
Maximum power	Pmax (Wp)	197	200
Maximum power voltage	Vmp (V)	30.7	31.1
Maximum power current	Imp (A)	6.38	6.44
Open circuit voltage	Voc (V)	37.5	37.6
Short circuit current	Isc (A)	6.73	6.79

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

## System integration parameters

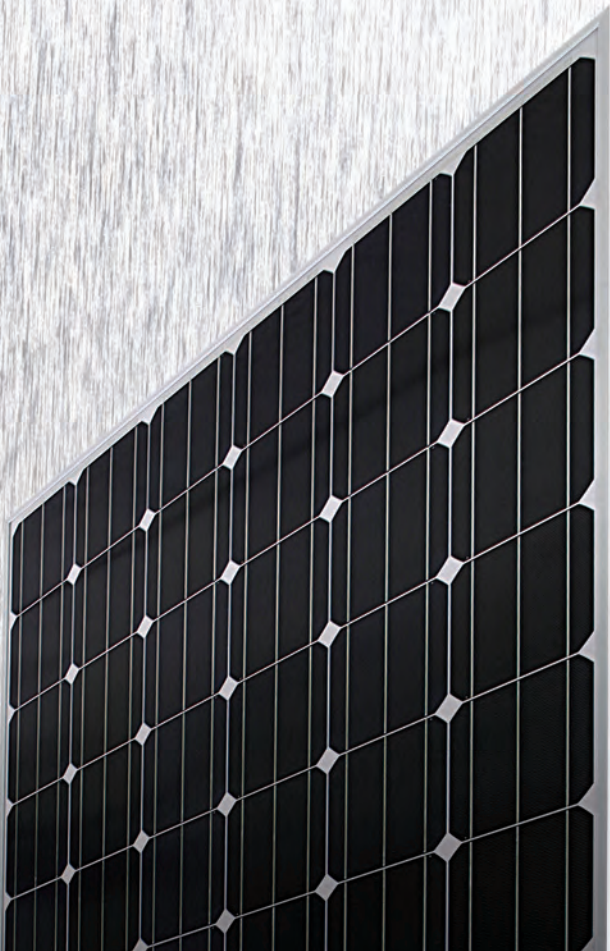
Maximum system voltage (IEC)	1,000 VDC
Maximum system voltage (UL)	600 VDC
Maximum series fuse rating	15 A
Maximum reverse current	Do not apply external voltages larger than Voc to the module

## Safety Ratings & Warranties

Fire Safety Classification	Class C
Certifications	UL 1703, CEC, IEC61215, IEC61730
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



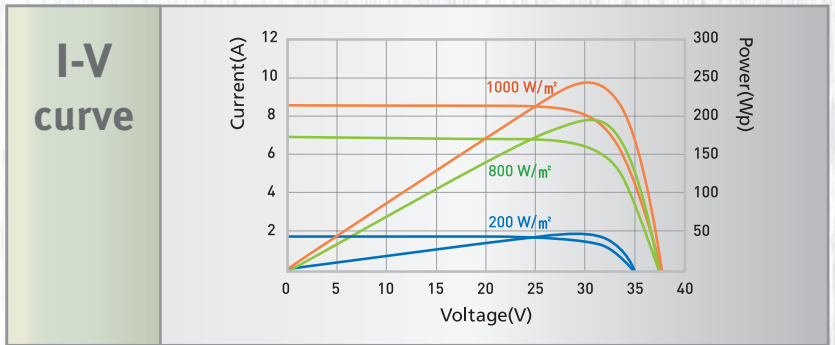
Temperature coefficients	
NOCT	45 ± 2 °C
TC I <sub>sc</sub>	-0.025%/K
TC Voc	-0.341%/K
TC P <sub>max</sub>	-0.519%/K

(NOCT : Nominal Operating Cell Temperature)

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

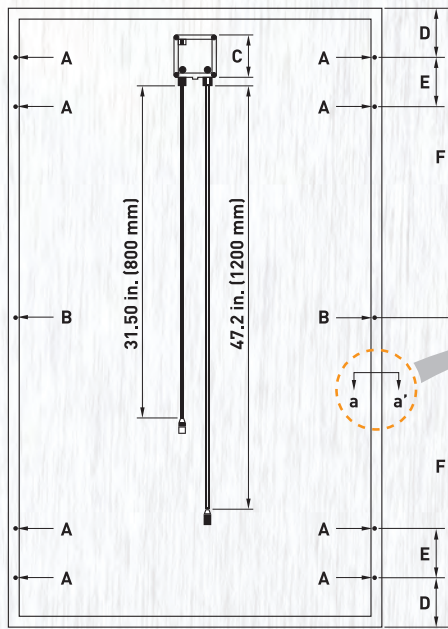
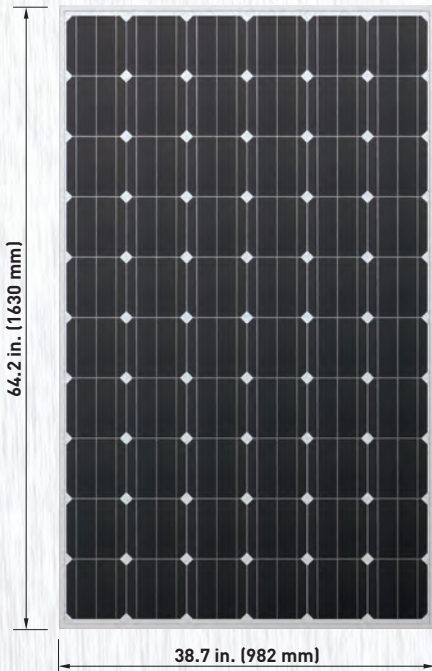


Physical characteristics (UL)		
Type	01(Screw)	02(Corner-key)
Cells per module	60	
Cell type	Mono-crystalline silicon	
Module dimensions	1630 x 982 x 47 mm	1630 x 982 x 46 mm
	64.2 x 38.7 x 1.85 inches	64.2 x 38.7 x 1.81 inches
Front Glass	3.2 mm (0.13 inches) Tempered glass	
Module weight	20.0 kg (44.09 lb)	18.6 kg (41.01 lb)
Frame Type	Screw	Corner-key
Junction box	Connector Type	Bizlink S418-xyz series (MC4 compatible)
	IP Grade	IP65
	Output Cable	(+) 1200 mm, (-) 800 mm (+) 47.2 inches, (-) 31.5 inches

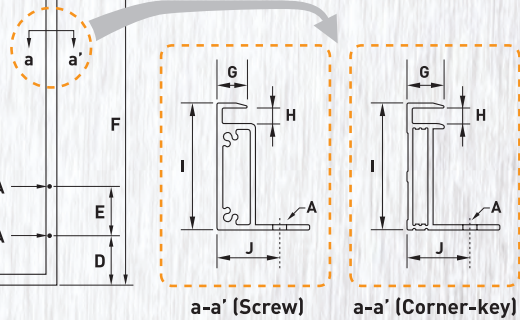


**FRONT**

**REAR**



	01(Screw)	02(Corner-key)
A	Ø 0.31 in. (8 mm)	
B	Ø 0.16 in. (4 mm)	
C	5.35 in. (136mm)	
D	5.12 in. (130mm)	
E	5.12 in. (130mm)	
F	32.09 in. (815mm)	
G	0.45 in. (11.5mm)	0.47 in. (12mm)
H	0.22 in. (5.7mm)	
I	1.85 in. (47mm)	1.81 in. (46mm)
J	0.98 in. (25mm)	0.69 in. (17.5mm)



\* All data subject to change without prior notice.

**SAMSUNG ELECTRONICS CO., LTD.**

San# 24 Nongseo-Dong, Giheung-Gu, Yongin-City, Gyeonggi-Do, Korea 446-711  
<http://www.samsung.com/us/business/solarmodule>  
 Ver. Oct 2010



YOUR SAMSUNG DISTRIBUTOR  
 SOLARIS  
 720-474-6050  
[www.solaris-shop.com](http://www.solaris-shop.com)

