



MonoX™

MonoX™ Solar Modules

LG250S1K

LG Electronics, Inc. (Korea Exchange: 06657.KS) is one of the globally leading companies and technology innovator for electronics, information and communication products. The LG Group currently employs more than 93,000 people worldwide in 120 companies. In fiscal year 2010 a turnover of 48.2 billion USD has been achieved.

LG is one of the world's largest manufacturers of mobile phones, flat screen TVs, air conditioners, washing machines and refrigerators. As a future-oriented company, LG relies on the technology of renewable energies and is expanding it. The range of products comprises high quality solar cells, solar modules and solar solutions which are being manufactured in LG's leading production site Korea.

Mono X™ are monocrystalline solar modules with very high power.



The LG Mark of Excellence

Customers rest assured of cutting-edge technology and reliability when they see the LG logo on every cell. The LG logo reflects the high standards that have guided LG for more than 50 years.



100% EL Test Completed

All LG modules are tested by Electroluminescence inspection. The EL inspection detects cracks unseen by the naked eye.



25 Years Linear Warranty

LG always stands by its products with sterling warranty policies. The linear performance warranty guarantees at least 80.2% power output by the end of the 25th year.



Outstanding Durability

LG Solar modules withstand heavy loads up to 5400 Pa, are light and easy to install.



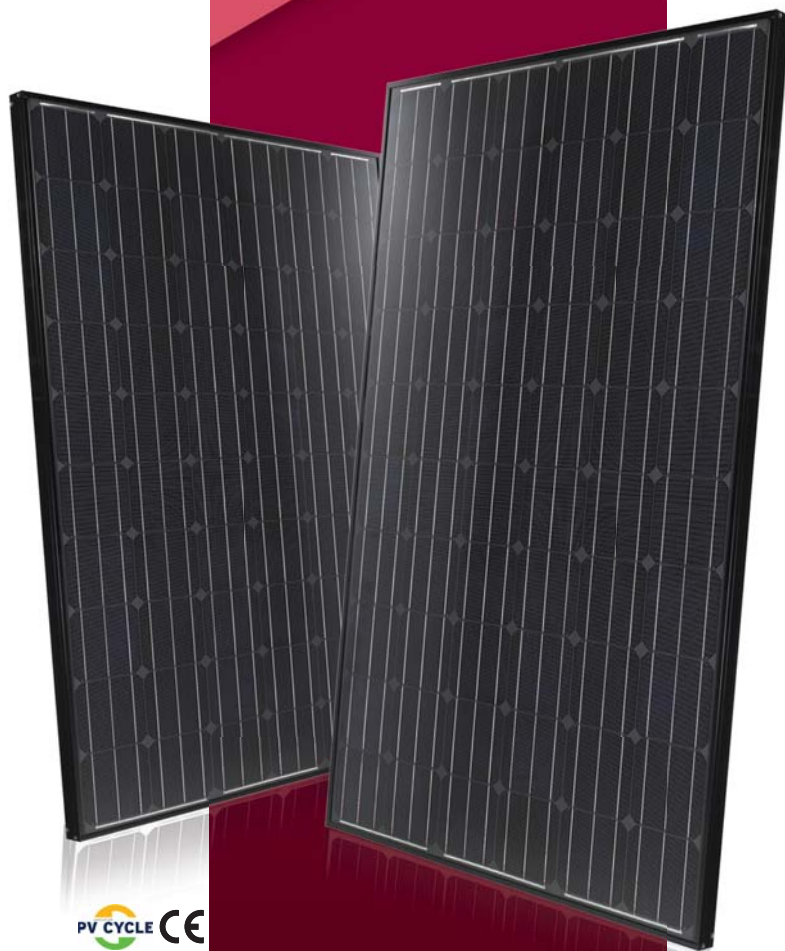
Positive Power Tolerance

LG provides rigorous quality testing to solar modules to assure customers of the stated power outputs of all modules, with a positive nominal tolerance starting at 0%.



Screw Type Frame

The Frame, with its screw type structure, minimizes torsion and ensures resistance to expanding pressure. The design of the frame allows for water drainage in all slopes and angles.



Mechanical Properties

Cells	6 × 10
Cell manufacturer	LG
Cell type	Monocrystalline
Cell dimensions	156 × 156 mm ²
Cell busbars	3
Front cover	Glass, 3,2 mm
Frame	Aluminium, anodized
Dimensions (L × W × H)	1632 × 986 × 42 mm
Maximum load	5400 Pa
Weight	18,4 kg
Connector type	MC4, IP 67
Junction box	IP 65 with 3 bypass diodes
Length of cables	2 × 1000 mm

Certifications & Warranty

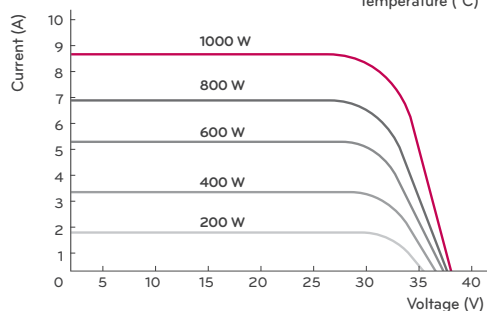
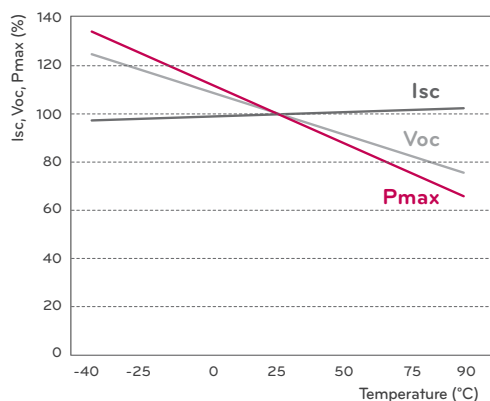
Certifications	IEC 61215, IEC 61730-1/-2 ISO 9001
Product warranty	10 years
Power warranty of P _{max}	25 years linear warranty*

*1st year: 97%, 2nd - 25th year: -0,7%/a, 25th year: 80,2%

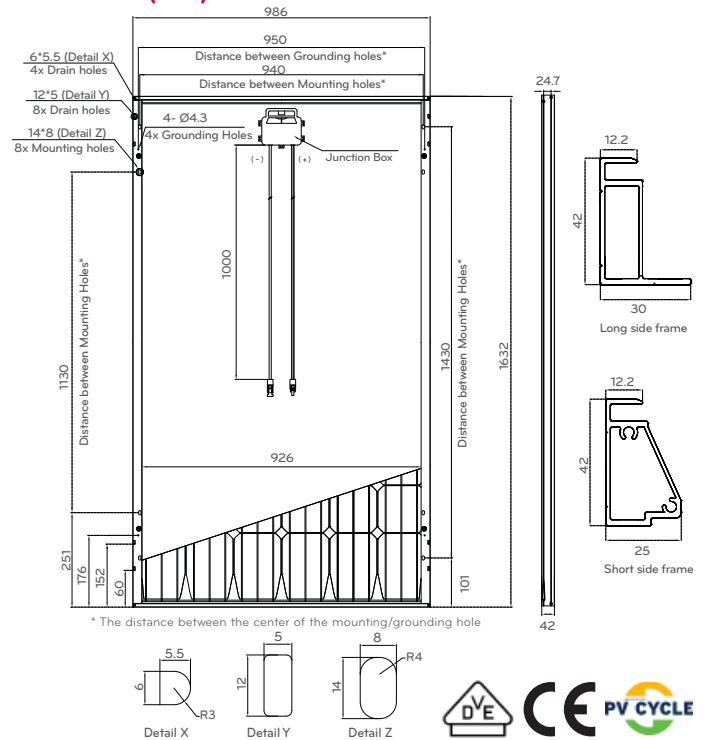
Temperature Coefficients

NOCT	46,0 ± 2 °C
P _{mpp}	-0,420%/K
V _{oc}	-0,306%/K
I _{sc}	0,042%/K

Characteristic Curves



Dimensions (mm)



Electrical Properties (STC*)

	LG250S1K
Maximum power at STC (P _{max})	250
Power tolerance (%)	0 ~ +3%
Maximum system voltage (V)	1000
Maximum series fuse rating (A)	15
Operating temperature (°C)	-40 ~ +90
MPP voltage (V _{mpp})	29,9
MPP current (I _{mpp})	8,37
Open circuit voltage (V _{oc})	37,1
Short circuit current (I _{sc})	8,76
Module efficiency (%)	15,5

*STC (Standard Test Condition): Irradiance 1000 W/m², module temperature 25°C, AM 1,5
Application class: A (after IEC 61730), Safety class: II
LG Electronics does not assume any warranty for the precision of the electrical data.
Subject to change without notice.

Electrical Properties (NOCT*)

	LG250S1K
Maximum power (W)	184
Maximum power voltage (V)	27,2
Maximum power current (A)	6,76
Open circuit voltage (V _{oc})	34,4
Short circuit current (I _{sc})	7,07
Efficiency reduction (from 1000 W/m ² to 200 W/m ²) (%)	< 4,5

*NOCT (Nominal Operating Cell Temperature): Irradiance 800 W/m², ambient temperature 20°C, wind speed 1 m/s

