

MonoX[®]

LG280S1C-B3 / LG275S1C-B3 / LG270S1C-B3

60 cell

MonoX[®] series are LG Electronics' high-quality monocrystalline module brands. The quality is the result of our strong commitment to developing a module to improve benefits for customers. Features of MonoX[®] series include higher efficiency and durability, convenient installation, and aesthetic exterior.



KM 564573 BSEN 61215
Photovoltaic Modules



Light and Robust

With a weight of just 16.8 kg, LG modules are proven to demonstrate outstanding durability against external pressure up to 5400 Pa.



Convenient Installation

LG modules are carefully designed to benefit installers by allowing quick and easy installations throughout the carrying, grounding, and connecting stages of modules.



100% EL Test Completed

All LG modules pass Electroluminescence inspection. This EL inspection detects cracks and other imperfections unseen by the naked eye.



The Extra 2% Power

To minimize losses due to mismatch, LG produces 3 groups of solar modules which are sorted by its current class. This enables MonoX[®] to maximize the system's output by around 2% based off the theoretical calculation.



Reliable Warranties

LG stands by its products with the strength of a global corporation and sterling warranty policies. LG offers a 10 year product limited warranty and a 25 year limited linear output warranty.



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%.

About LG Electronics

LG Electronics is a global big player who has been committed to expanding its capacity, based on solar energy business as its future growth engine. We embarked on a solar energy source research program in 1985, supported by LG Group's rich experience in semi-conductor, LCD, chemistry, and materials industry. We successfully released the first MonoX[®] series on the market, in 2010, which were exported to 32 countries in 2 years, thereafter. In 2013, MonoX[®] NeON won "Intersolar Award", which proved it's the leader of innovation in the industry.

Mechanical Properties

Cells	6 x 10
Cell vendor	LG
Cell type	Monocrystalline
Cell dimensions	156.5 x 156.5 mm / 6 x 6 in
# of busbar	3
Dimensions (L x W x H)	1640 x 1000 x 35 mm 64.57 x 39.37 x 1.38 in
Static snow load	5400 Pa / 113 psf
Static wind load	2400 Pa / 50 psf
Weight	16.8 ± 0.5 kg / 36.96 ± 1.1 lb
Connector type	MC4 connector IP 67
Junction box	IP 67 with 3 bypass diodes
Length of cables	1000 mm / 39.37 in
Glass	High transmission tempered glass
Frame	Anodized aluminum

Certifications and Warranty

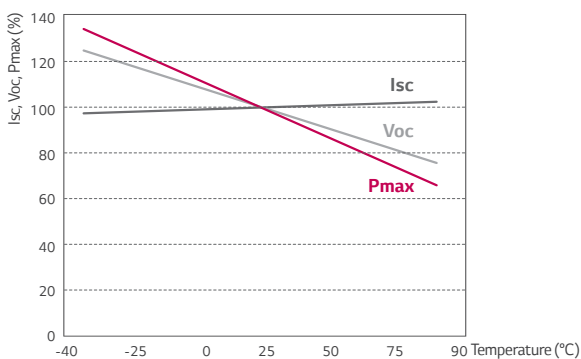
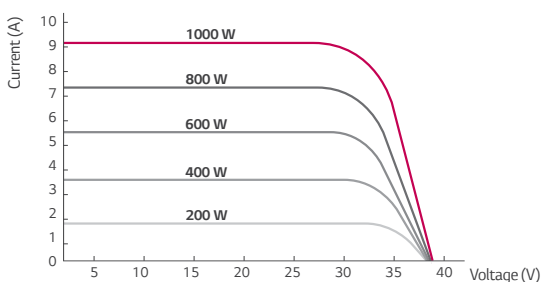
Certifications	IEC 61215, IEC 61730-1/-2, Salt Mist Corrosion Test (IEC61701), DLG-Fokus Test "Ammonia Resistance", UL 1703, ISO 9001
Product warranty	10 years
Output warranty of Pmax (measurement Tolerance ± 3%)	Linear warranty*

* 1) 1st year: 97%, 2) After 2nd year: 0.7% annual degradation, 3) 80.2% for 25 years

Temperature Coefficients

NOCT	45.0 ± 2 °C
Pmpp	-0.43 %/°C
Voc	-0.31 %/°C
Isc	0.04%/°C

Characteristic Curves



Electrical Properties (STC*)

	280 W	275 W	270 W
MPP voltage (Vmpp)	31.9	31.7	31.5
MPP current (Impp)	8.78	8.68	8.58
Open circuit voltage (Voc)	38.8	38.7	38.5
Short circuit current (Isc)	9.33	9.26	9.17
Module efficiency (%)	17.1	16.8	16.5
Operating temperature (°C)	-40 ~ +90		
Maximum system voltage (V)	1000 (IEC), 600 (UL)		
Maximum series fuse rating (A)	15		
Power tolerance (%)	0 ~ +3		

* STC (Standard Test Condition): Irradiance 1000 W/m², module temperature 25 °C, AM 1.5

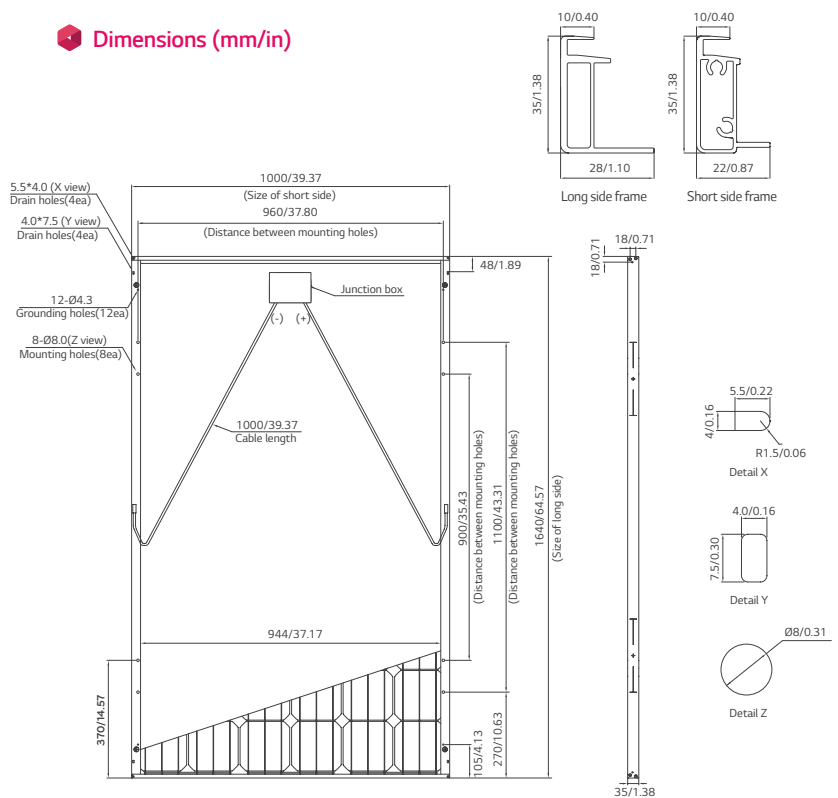
* The nameplate power output is measured and determined by LG Electronics at its sole and absolute discretion.

Electrical Properties (NOCT*)

	280 W	275 W	270 W
Maximum power (Pmpp)	205	202	198
MPP voltage (Vmpp)	29.3	29.1	29.0
MPP current (Impp)	7.00	6.92	6.84
Open circuit voltage (Voc)	36.0	35.9	35.7
Short circuit current (Isc)	7.52	7.46	7.39
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

Dimensions (mm/in)



* The distance between the center of the mounting/grounding holes

