

LG425QAK-A6 | LG420QAK-A6 | LG415QAK-A6

General Data

Cell Properties (Material / Type)	Monocrystalline / N-type
Cell Maker	LG
Cell Configuration	66 Cells (6 x 11)
Module Dimensions (L x W x H)	1,910 x 1,042 x 40mm
Weight	20.5kg
Glass (Material)	Tempered Glass with AR coating
Backsheet (Color)	Black
Frame (Material)	Anodized Aluminium
Junction Box (Protection Degree)	IP 68 with 3 Bypass Diodes
Cables (Length)	1,250mm x 2EA
Connector (Type / Maker)	MC4 / MC

Certifications and Warranty

Certifications	IEC 61215-1/-1-1/2:2016, IEC 61730-1/2:2016, UL 61730-1:2017, UL 61730-2:2017 ISO 9001, ISO 14001, ISO 50001 OHSAS 18001
Salt Mist Corrosion Test	IEC 61701:2012 Severity 6
Ammonia Corrosion Test	IEC 62716:2013
Hail Test	25mm (1") diameter at 23m/s (52mph)
Module Fire Performance	Type 2 (UL 61730)
Fire Rating	Class C (UL 790, ULC / ORD C 1703)
Solar Module Product Warranty	25 Years
Solar Module Output Warranty	Linear Warranty*

* 1) First years : 98.5%, 2) After 1st year : 0.25% annual degradation, 3) 92.5% for 25 years (TBD)

Temperature Characteristics

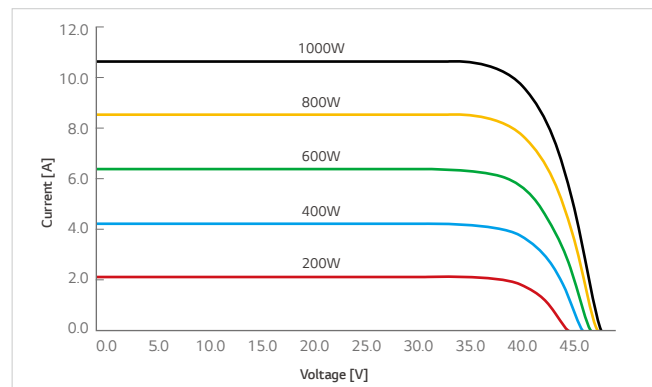
NMOT*	[°C]	44 ± 3
Pmax	[%/°C]	-0.29
Voc	[%/°C]	-0.24
Isc	[%/°C]	0.04

* NMOT (Nominal Module Operating Temperature) : Irradiance 800W/m², Ambient temperature 20°C, Wind speed 1 m/s, Spectrum AM 1.5

Electrical Properties (NMOT)

Model		LG425QAK-A6	LG420QAK-A6	LG415QAK-A6
Maximum Power (Pmax)	[W]	322	319	315
MPP Voltage (Vmpp)	[V]	39.0	39.0	38.9
MPP Current (Impp)	[A]	8.26	8.17	8.08
Open Circuit Voltage (Voc)	[V]	45.9	45.8	45.7
Short Circuit Current (Isc)	[A]	8.74	8.73	8.72

I-V Curves



Electrical Properties (STC*)

Model		LG425QAK-A6	LG420QAK-A6	LG415QAK-A6
Maximum Power (Pmax)	[W]	425	420	415
MPP Voltage (Vmpp)	[V]	41.3	41.3	41.2
MPP Current (Impp)	[A]	10.31	10.19	10.08
Open Circuit Voltage (Voc, ± 5 %)	[V]	48.1	48.0	47.9
Short Circuit Current (Isc, ± 5 %)	[A]	10.84	10.83	10.82
Module Efficiency	[%]	21.4	21.1	20.9
Power Tolerance	[%]	0 ~ +3		

* STC (Standard Test Condition) : Irradiance 1000 W/m², Cell temperature 25°C, AM 1.5, Measure tolerance : ±3%

Operating Conditions

Operating Temperature*	[°C]	-40 ~ +85
Maximum System Voltage	[V]	1,000
Maximum Series Fuse Rating	[A]	20
Mechanical Test Load** (Front)	[Pa/psf]	5,400
Mechanical Test Load** (Rear)	[Pa/psf]	4,000

* The operating ambient temperature of these devices may exceed 40°C at full load for all wire sizes if is determined suitable in the field use application

** Based on IEC 61215-2 : 2016 (Test Load = Design Load x Safety Factor (1.5))

Packaging Configuration

Number of Modules Per Pallet	[EA]	TBD
Number of Modules Per 40ft HQ Container	[EA]	
Packaging Box Dimensions (L x W x H)	[mm]	
Packaging Box Gross Weight	[kg]	

Dimensions (mm/inch)

