

LG NeON[®] 2

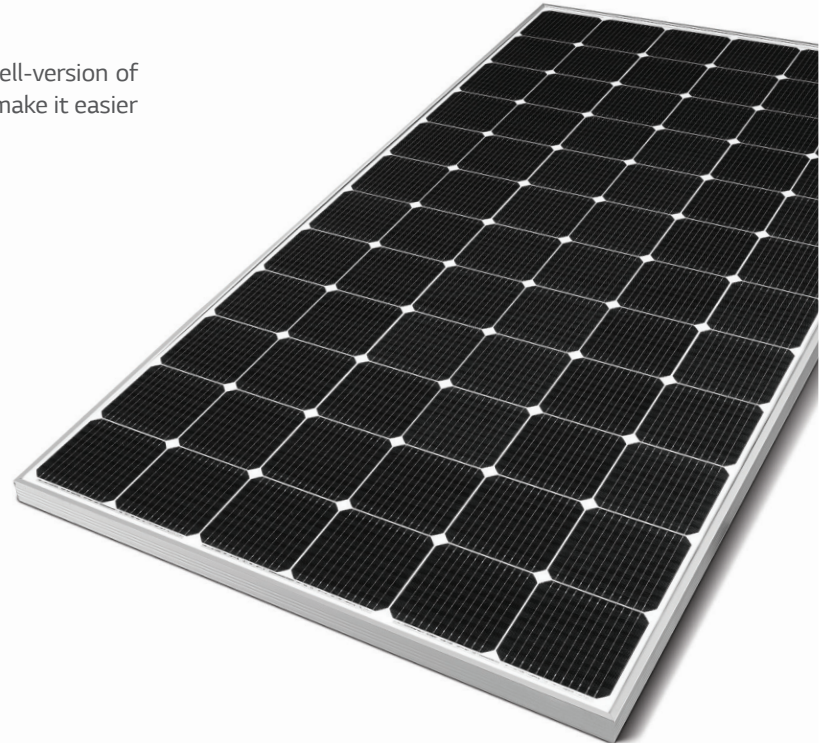
LG400N2W-A5 | LG395N2W-A5 | LG390N2W-A5



72

400W | 395W | 390W

The LG NeON[®] 2 is LG's best selling solar module. Especially 72cell-version of the NeON[®] 2 is suited for commercial or utility applications, that make it easier to manage space with maximizing the power of a unit.



Feature



Enhanced Performance Warranty

LG NeON[®] 2 has an enhanced performance warranty. After 25 years, LG NeON[®] 2 is guaranteed at least 84.8% of initial performance.



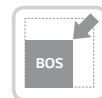
High Power Output

LG NeON[®] 2 has been designed to significantly enhance its output efficiency making it efficient even in limited space.



Improved Product Warranty

As well as the enhanced performance warranty, LG has extended the product warranty of the LG NeON[®] 2 for an additional 2 years.



BOS (Balance Of System) Saving

LG NeON[®] 2 can reduce the total number of strings due to its high module efficiency resulting in a more cost effective and efficient solar power system.



Better Performance on a Sunny Day

LG NeON[®] 2 now performs better on a sunny days thanks to its improved temperature coefficient.



Near Zero LID (Light Induced Degradation)

The n-type cells used in LG NeON[®] 2 have almost no boron, which may cause the initial performance degradation, leading to less LID.

About LG Electronics

LG Electronics is a global big player, committed to expanding its operations with the solar market. The company first embarked on a solar energy source research program in 1985, supported by LG Group's vast experience in the semi-conductor, LCD, chemistry and materials industries. In 2010, LG Solar successfully released its first MonoX[®] series to the market, which is now available in 32 countries. The NeON[®] (previous MonoX[®] NeON), NeON[®]2, NeON[®]2 BiFacial won the "Intersolar AWARD" in 2013, 2015 and 2016, which demonstrates LG Solar's lead, innovation and commitment to the industry.



LG NeON[®] 2

LG400N2W-A5 | LG395N2W-A5 | LG390N2W-A5

Mechanical Properties

Cells	6 x 12
Cell Vendor	LG
Cell Type	Monocrystalline / N-type
Cell Dimensions	161.7 x 161.7 mm / 6 inches
# of Busbar	12 (Multi Wire Busbar)
Dimensions (L x W x H)	2,024 x 1,024 x 40 mm 79.69 x 40.31 x 1.57 in
Front Load	5,400 Pa / 113 psf
Rear Load	4,300 Pa / 90 psf
Weight	21.7 kg / 47.84 lb
Connector Type	MC4 (MC)
Junction Box	IP68 with 3 Bypass Diodes
Cables	1,200 mm x 2 ea / 47.24 in x 2 ea
Glass	High Transmission Tempered Glass
Frame	Anodized Aluminium

Certifications and Warranty

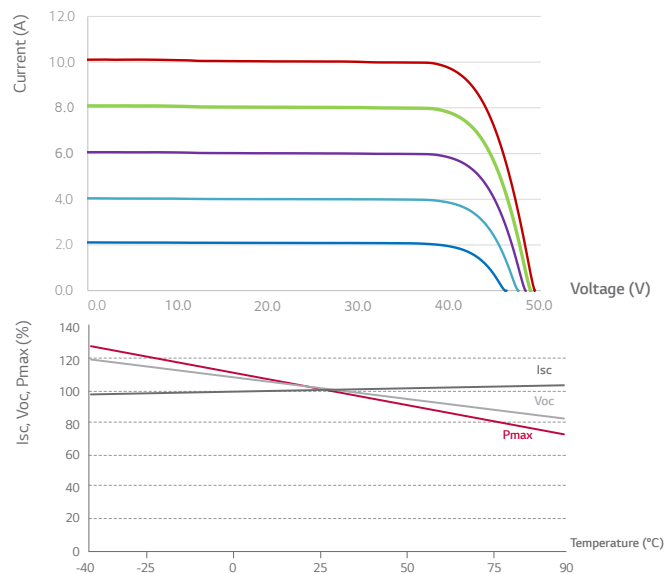
Certifications	IEC 61215, IEC 61730-1/-2 UL 1703 IEC 61701 (Salt mist corrosion test) IEC 62716 (Ammonia corrosion test) ISO 9001
Module Fire Performance	Type 1 (UL 1703)
Fire Rating	Class C (ULC/ORD C 1703, IEC 61730)
Product Warranty	12 Years
Output Warranty of Pmax	Linear Warranty*

* 1) 1st year : 98%, 2) after 1st year : 0.55%p annual degradation, 3) 84.8% for 25 years

Temperature Characteristics

NOCT	[°C]	45 ± 3
Pmax	[%/°C]	-0.36
Voc	[%/°C]	-0.26
Isc	[%/°C]	0.02

Characteristic Curves



Electrical Properties (STC*)

Model		LG400N2W-A5	LG395N2W-A5	LG390N2W-A5
Maximum Power (Pmax)	[W]	400	395	390
MPP Voltage (Vmpp)	[V]	40.6	40.2	39.8
MPP Current (Impp)	[A]	9.86	9.83	9.81
Open Circuit Voltage (Voc)	[V]	49.3	49.2	49.1
Short Circuit Current (Isc)	[A]	10.47	10.43	10.39
Module Efficiency	[%]	19.3	19.1	18.8
Operating Temperature	[°C]	-40 ~ +90		
Maximum System Voltage	[V]	1000 (IEC) / 1500 (UL)		
Maximum Series Fuse Rating	[A]	20		
Power Tolerance	[%]	0 ~ +3		

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

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

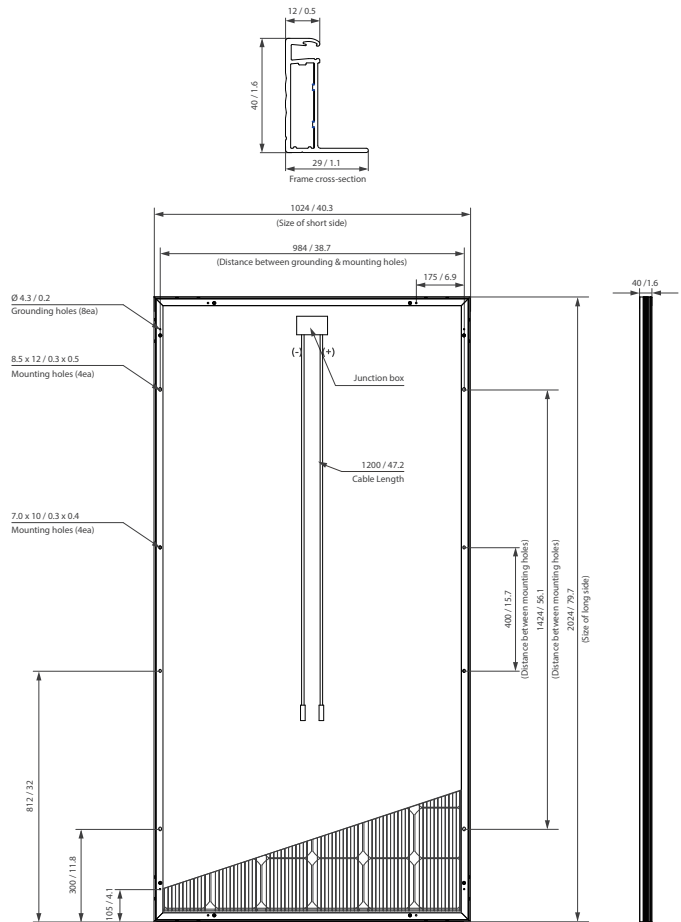
The Typical change in module efficiency at 200 W/m² in relation to 1000 W/m² is -2.0%.

Electrical Properties (NOCT*)

Model		LG400N2W-A5	LG395N2W-A5	LG390N2W-A5
Maximum Power (Pmax)	[W]	296	293	289
MPP Voltage (Vmpp)	[V]	37.6	37.2	36.9
MPP Current (Impp)	[A]	7.88	7.86	7.84
Open Circuit Voltage (Voc)	[V]	46.1	46.0	45.9
Short Circuit Current (Isc)	[A]	8.41	8.38	8.35

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

Dimensions (mm / inch)



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



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07336, Korea
www.lg-solar.com

Product specifications are subject to change without notice.
DS-NS-72-W-G-F-EN-70525

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This authorizes the application of the Certification Mark(s) shown below to the models described in the Product(s) Covered section when made in accordance with the conditions set forth in the Certification Agreement and Listing Report. This authorization also applies to multiple listee model(s) identified on the correlation page of the Listing Report.

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Party Authorized To Apply Mark: Same as Manufacturer
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for Dean Davidson, Certification Manager



Intertek

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Telephone 800-345-3851 or 847-439-5667 Fax 312-283-1672

Standard(s):	Inverters, Converters, Controllers And Interconnection System Equipment For Use With Distributed Energy Resources [UL 1741:2010 Ed.2+R:07Sep2016]
Product:	String PV Inverter
Brand Name:	Yaskawa Solectria Solar
Models:	XGI 1000-60 XGI 1000-65

YASKAWA

SOLECTRIA XGI 1000

Premium 3-Ph Transformerless Commercial String Inverters

Features

- Made in the USA with global components
- Buy American Act (BAA) compliant
- 60kW and 65kW
- Built to last
- Lowest cost of labor/installation
- Access to all inverters on-site via WiFi from one location
- Lowest cost of O&M
- Remote diagnostics
- Remote software & firmware upgrades
- 5-90° installation angles
- 4 MPPTs
- Advanced grid-support functions
- Integrated AFCI

Options

- Plug & play MC4 or H4 connectors
- Web-based monitoring
- Revenue grade metering



Yaskawa Solectria Solar's XGI 1000 commercial string inverters are designed for high reliability and built with the highest quality components. Components were selected, tested and proven to last beyond their warranty. The XGI 1000 inverters provide advanced grid-support functionality and meet the latest IEEE 1547 and UL 1741 standards for safety. Offering a wide mounting-angle range (5 – 90° from horizontal), the XGI inverters can be installed to meet NEC array-level rapid shutdown requirements. Designed and engineered in Lawrence, MA, the XGI inverters are assembled and tested at Yaskawa America's facilities in Buffalo Grove, IL.

The all new XGI 1000 inverters are Made in the USA with global components and are compliant with the Buy American Act.

MADE IN THE USA



With U.S. and Global Components

SOLECTRIA SOLAR

SOLECTRIA XGI 1000

Specifications

	XGI 1000-60/60	XGI 1000-60/65	XGI 1000-65/65
DC Input			
Absolute Maximum Input Voltage	1000 VDC	1000 VDC	1000 VDC
Maximum Power Input Voltage Range (MPPT)	580-850 VDC	600-850 VDC	600-850 VDC
Operating Voltage Range (MPPT)	350-950 VDC	350-950 VDC	350-950 VDC
Maximum Operating Input Current	105.6 A (26.4 A per zone)	105.6 A (26.4 A per zone)	110.6 A (27.65 A per zone)
Maximum Rated PV Input (per MPPT)	22.5 kW	22.5 kW	24.4 kW
Number of MPP Trackers	4 / 1 (default)	4 / 1 (default)	4 / 1 (default)
Number of PV Source Circuits (Fused Inputs)	4 per MPPT; 16 total	4 per MPPT; 16 total	4 per MPPT; 16 total
Maximum PV Current (Isc x 1.25) per Zone / Total Maximum PV Current	50 A / 180 A	50 A / 180 A	50 A / 180 A
Maximum Recommended DC to AC Ratio	1.5	1.5	1.5
AC Output			
Nominal Output Voltage	480 VAC, 3-Ph	480 VAC, 3-Ph	480 VAC, 3-Ph
AC Voltage Range	-12 / +10%	-12 / +10%	-12 / +10%
Continuous Real Output Power	60 kW	60 kW	65 kW
Continuous Apparent Output Power	60 kVA	65 kVA	65 kVA
Maximum Output Current	72.2 A	78.2 A	78.2 A
Nominal Output Frequency	60 Hz	60 Hz	60 Hz
Power Factor (Unity default)	+/- 0.85 Adjustable	+/- 0.85 Adjustable	+/- 0.85 Adjustable
Total Harmonic Distortion (THD) @ Rated Power	<3%	<3%	<3%
Grid Connection Type	3-Ph + N/GND	3-Ph + N/GND	3-Ph + N/GND
Fault Current Contribution (1 cycle RMS)	93.9 A	101.7 A	101.7 A
Recommended AC Overcurrent Device Rating	100 A (AC Maximum Output Current x 1.25)		
Efficiency			
Peak Efficiency	98.2%	98.2%	98.2%
CEC Average Efficiency	98.0%	98.0%	98.0%
Tare Loss	<1 W	<1 W	<1 W
Temperature			
Ambient Temperature Range	-40°F to 140°F (-40°C to 60°C)		
De-Rating Temperature	122°F (50°C)	113°F (45°C)	
Storage Temperature Range	-40°F to 167°F (-40°C to 75°C)		
Relative Humidity (non-condensing)	0-95%		
Operating Altitude	9,842.5 ft (3,000 m)		
Communications			
Advanced Graphical User Interface	WiFi		
Communication Interface	RJ-45 Ethernet		
Third-Party Monitoring Protocol	Sunspec Modbus TCP/IP		
Web-Based Monitoring	Optional		
Revenue Grade Metering	Optional		
Firmware Updates	Remote/Local		
Testing & Certifications			
Safety Listings & Certifications	UL 1741 / IEEE 1547, UL 1699B, UL 1998		
Testing Agency	Intertek		
FCC Compliance	FCC Part 15, Class A		
Warranty			
Standard Limited Warranty	10 Years		
Enclosure			
Acoustic Noise Rating	55 dBA @ 3 m		
DC Disconnect	Integrated, 2 Pole		
Mounting Angle	5-90° Measured from horizontal		
Dimensions (H x W x D)	45.8 in. x 28.3 in. x 11.6 in. (1163 x 719 x 295 mm)		
Weight	Inverter: 123 lbs (55.8 kg); Wiring Box: 53 lbs (24.1 kg)		
Enclosure Rating and Finish	Type 4, Polyester Powder-Coated Aluminum		

Specifications subject to change.

SOLECTRIA SOLAR

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YASKAWA

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SOLECTRIA XGI 1000

Premium 3-Ph Transformerless Commercial String Inverters

Features

- Made in the USA with global components
- Buy American Act (BAA) compliant
- 50kW, 60kW and 65kW
- Built to last
- Lowest cost of labor/installation
- Access to all inverters on-site via WiFi from one location
- Lowest cost of O&M
- Remote diagnostics
- Remote software & firmware upgrades
- 5-90° installation angles
- 4 MPPTs
- Advanced grid-support functions
- Integrated AFCI

Options

- Plug & play MC4 or H4 connectors
- Web-based monitoring
- Revenue grade metering
- Extended warranty



Yaskawa Solectria Solar's XGI 1000 commercial string inverters are designed for high reliability and built with the highest quality components. Components were selected, tested and proven to last beyond their warranty. The XGI 1000 inverters provide advanced grid-support functionality and meet the latest IEEE 1547 and UL 1741 standards for safety. Offering a wide mounting-angle range (5 – 90° from horizontal), the XGI inverters can be installed to meet NEC array-level rapid shutdown requirements. Designed and engineered in Lawrence, MA, the XGI inverters are assembled and tested at Yaskawa America's facilities in Buffalo Grove, IL. The all new XGI 1000 inverters are Made in the USA with global components and are compliant with the Buy American Act.



SOLECTRIA SOLAR

SOLECTRIA XGI 1000

Specifications

	XGI 1000-50/60	XGI 1000-60/60	XGI 1000-60/65	XGI 1000-65/65
DC Input				
Absolute Maximum Input Voltage	1000 VDC	1000 VDC	1000 VDC	1000 VDC
Maximum Power Input Voltage Range (MPPT)	580-850 VDC	580-850 VDC	600-850 VDC	600-850 VDC
Operating Voltage Range (MPPT)	350-950 VDC	350-950 VDC	350-950 VDC	350-950 VDC
Maximum Operating Input Current	88.0 A (22.0 A per zone)	105.6 A (26.4 A per zone)	105.6 A (26.4 A per zone)	110.6 A (27.65 A per zone)
Maximum Operating PV Power (per MPPT)	12.8 kW	15.3 kW	15.3 kW	16.6 kW
Maximum Rated PV Input (per MPPT)	18.75 kW	22.5 kW	22.5 kW	24.4 kW
Number of MPP Trackers	4 / 1 (default)	4 / 1 (default)	4 / 1 (default)	4 / 1 (default)
Number of PV Source Circuits (Fused Inputs)	4 per MPPT; 16 total	4 per MPPT; 16 total	4 per MPPT; 16 total	4 per MPPT; 16 total
Maximum PV Current (Isc x 1.25) per Zone / Single Zone	50 A / 180 A	50 A / 180 A	50 A / 180 A	50 A / 180 A
Maximum Recommended DC to AC Ratio	1.5	1.5	1.5	1.5
AC Output				
Nominal Output Voltage	480 VAC, 3-Ph	480 VAC, 3-Ph	480 VAC, 3-Ph	480 VAC, 3-Ph
AC Voltage Range	-12 / +10%	-12 / +10%	-12 / +10%	-12 / +10%
Continuous Real Output Power	50 kW	60 kW	60 kW	65 kW
Continuous Apparent Output Power	60 kVA	60 kVA	65 kVA	65 kVA
Maximum Output Current	72.2 A	72.2 A	78.2 A	78.2 A
Nominal Output Frequency	60 Hz	60 Hz	60 Hz	60 Hz
Power Factor (Unity default)	+/- 0.85 Adjustable	+/- 0.85 Adjustable	+/- 0.85 Adjustable	+/- 0.85 Adjustable
Total Harmonic Distortions (THD) @ Rated Power	<3%	<3%	<3%	<3%
Grid Connection Type	3-Ph + N/GND	3-Ph + N/GND	3-Ph + N/GND	3-Ph + N/GND
Fault Current Contribution (1 cycle RMS)	93.9 A	93.9 A	101.7 A	101.7 A
Recommended AC Overcurrent Device Rating	100 A (AC Maximum Output Current x 1.25)			
Efficiency				
Peak Efficiency	98.2%	98.2%	98.2%	98.2%
CEC Average Efficiency	98.0%	98.0%	98.0%	98.0%
Tare Loss	<1 W	<1 W	<1 W	<1 W
Temperature				
Ambient Temperature Range	-40°F to 140°F (-40°C to 60°C)			
De-Rating Temperature	122°F (50°C)		113°F (45°C)	
Storage Temperature Range	-40°F to 167°F (-40°C to 75°C)			
Relative Humidity (non-condensing)	0-95%			
Operating Altitude	9,842.5 ft (3,000 m)			
Communications				
Advanced Graphical User Interface	WiFi			
Communication Interface	RJ-45 Ethernet			
Third-Party Monitoring Protocol	Sunspec Modbus TCP/IP			
Web-Based Monitoring	Optional			
Revenue Grade Metering	Optional			
Firmware Updates	Remote/Local			
Testing & Certifications				
Safety Listings & Certifications	UL 1741 / IEEE 1547, UL 1699B, UL 1998			
Advanced Grid Support Functionality	Rule 21, UL 1741SA (pending)			
Testing Agency	Intertek			
FCC Compliance	FCC Part 15, Class A			
Warranty				
Standard and Options	10 Years Standard; Options for 15 and 20 Years			
Enclosure				
Acoustic Noise Rating	55 dBA @ 1 m			
DC Disconnect	Integrated, 2 Pole			
Mounting Angle	5-90° Measured from horizontal			
Dimensions (H x W x D)	45.8 in. x 28.3 in. x 11.6 in. (1163 x 719 x 295 mm)			
Weight	Inverter: 117 lbs (53.07 kg); Wiring Box: 49 lbs (22.22 kg)			
Enclosure Rating and Finish	Type 4, Polyester Powder-Coated Aluminum			

Specifications subject to change.

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