

LGA-HJ Series Off-grid Inverter



LGA-HJ series is a high-frequency pure sine wave inverter that can convert 12/24/48VDC to 220/230/240VAC (or 100/110/120VAC) and power the AC loads. It is designed according to the international standard with higher quality, reliability, and safety. Ranging from 350W to 5000W, LGA-HJ series is compatible with lithium-ion battery perfectly and suits any situation of DC to AC, such as RVs, boats, residentials, and places where require high quality of electrical power.

Features

- Pure sine wave output
- Input to output electrical isolation
- Digital dual closed-loop control of voltage and current
- Input surge current suppression for lithium battery systems
- Output power factor up to 1
- Simple system wiring & 180 degrees rotating LCD
- Input Protection: Reverse polarity, Low-voltage, Over-voltage
- Output Protection: Overload, Short circuit, Overheating
- Phone and PC remote control through RS485 port
- Extra external switch port
- Safety (EN/IEC62109) & EMC approved by international standards



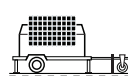
Solar Car



Solar Home



Solar Boat



Solar Power Generator

Parameters	LGA-351ALC1-HJ	LGA-351BLC1-HJ	LGA-501ALC1-HJ	LGA-501BLC1-HJ	LGA-102ALC1-HJ	LGA-102BLC1-HJ	LGA-102DLC1-HJ
Continuous Output Power	350W@35°C@ Rated input voltage		500W@35°C@ Rated input voltage		1000W@35°C@ Rated input voltage		
Surge Power	700W@5S		1000W@5S		2000W@5S		
Surge Current When Power On	<30A		<50A		<100A		<35A
Output Voltage	100VAC/110VAC (±3%); 120VAC (-7%~+3%)				100VAC/110VAC (±3%); 120VAC (-7%~+3%)		100VAC/110VAC /120VAC (±3%)
Output Frequency	50/60Hz ± 0.2%						
Output Wave	Pure Sine Wave						
Output Distortion THD	THD ≤ 4% (Resistive load)	THD ≤ 3% (Resistive load)	THD ≤ 4% (Resistive load)		THD ≤ 4% (Resistive load)	THD ≤ 3% (Resistive load)	THD ≤ 3% (Resistive load)
Load Power factor	0.2~1 (Lad power ≤ Continuous output power)						
Rated Input Voltage	12VDC	24VDC	12VDC	24VDC	12VDC	24VDC	48VDC
Input Voltage Range	10.8~16.0VDC	21.6~32VDC	10.8~16.0VDC	21.6~32VDC	10.8~16.0VDC	21.6~32.0VDC	43.2~64.0VDC
Rated Output Efficiency①	>87.0%	>90.0%	>87.5%	>90.0%	>87.0%	>90.0%	>91.0%
Max. Output Efficiency②	>89.0% (70% loads)	>90.5% (70% loads)	>90.0% (40% loads)	>91.0% (40% loads)	>92.0% (40% loads)	>92.5% (30% loads)	>92.5% (40% loads)
Idle Current	<0.15A	<0.10A	<0.15A	<0.10A	<0.2A	<0.15A	<0.1A
No-load Current	<0.8A	<0.4A	<0.8A	<0.5A	<0.8A	<0.6A	<0.5A
USB Output	5VDC/Max.1A						—
RS485 com.prt	5VDC/200mA						
Input Terminal	M6						
Dimension (L *W*H)	229×163.5×75mm (with decorative cover) 229×160×73mm (without decorative cover)		286×163.5×78mm (with decorative cover) 286×160×78mm (without decorative cover)		371×231.5×123mm		332×231.5×123 mm
Mounting Size (L *W)	205×75mm		262×75mm		345×145mm		306×145mm
Mounting Hole Size	Φ5mm				Φ6mm		
Net Weight	1.47kg		2.00kg		5.15kg	4.86kg	4.36kg

① It is measured in the condition of continuous output power and rated input voltage.

② It means the max. output efficiency when the inverter is connected with different loads under the rated input voltage.

Remarks: Specifications are subject to change without notice.

Parameters	LGA-152ALC1-HJ	LGA-152BLC1-HJ	LGA-152DLC1-HJ	LGA-202ALC1-HJ	LGA-202BLC1-HJ	LGA-202DLC1-HJ
Continuous Output Power	1500W@35°C@ Rated input voltage			2000W@35°C@ Rated input voltage		
Surge Power	3000W@5S			4000W@5S		
Surge Current When Power On	<100A		<50A	<100A		<50A
Output Voltage	100VAC/110VAC (±3%); 120VAC (-7%~+3%)			100VAC/110VAC (±3%); 120VAC (-7%~+3%)		
Output Frequency	50/60Hz ± 0.2%					
Output Wave	Pure Sine Wave					
Output Distortion THD	THD ≤ 4% (Resistive load)			THD ≤ 5% (Resistive load)	THD ≤ 4% (Resistive load)	THD ≤ 4% (Resistive load)
Load Power factor	0.2~1 (Lad power ≤ Continuous output power)					
Rated Input Voltage	12VDC	24VDC	48VDC	12VDC	24VDC	48VDC
Input Voltage Range	10.8~16.0VDC	21.6~32.0VDC	43.2~64.0VDC	10.8~16.0VDC	21.6~32.0VDC	43.2~64.0VDC
Rated Output Efficiency①	>88.0%	>88.0%	>90.0%	>85.0%	>88.0%	>88.0%
Max. Output Efficiency②	>93.0% (30% loads)	>92.5% (30% loads)	>92.0% (30% loads)	>92.0% (30% loads)	>92.0% (30% loads)	>93.0% (30% loads)
Idle Current	<0.2A	<0.15A	<0.1A	<0.2A	<0.15A	<0.1A
No-load Current	<1.0A	<0.9A	<0.5A	<1.2A	<0.9A	<0.5A
USB Output	5VDC/Max.1A		—	5VDC/Max.1A		—
RS485 com.prt	5VDC/200mA					
Input Terminal	M6			M10	M6	
Dimension (L *W *H)	387×231.5×123mm			420×231.5×123mm	421×231.5×123mm	
Mounting Size (L *W)	361×145mm			395×145mm		
Mounting Hole Size	Φ6mm					
Net Weight	5.90kg	5.70kg	5.53kg	7.45kg	6.28kg	6.20kg

① It is measured in the condition of continuous output power and rated input voltage.

② It means the max. output efficiency when the inverter is connected with different loads under the rated input voltage.

Remarks: Specifications are subject to change without notice.

Parameters	LGA-302ALC1-HJ	LGA-302BLC1-HJ	LGA-302DLC1-HJ	LGA-402DLC1-HJ
Continuous Output Power	3000W@35°C@ Rated input voltage			4000W@35°C @ Rated input voltage
Surge Power	4800W@5S	6000W@5S	6000W@5S	8000W@5S
Surge Current When Power On	<100A	<100A	<65A	<65A
Output Voltage	100VAC/110VAC (±3%); 120VAC (-7%~+3%)			
Output Frequency	50/60Hz ± 0.2%			
Output Wave	Pure Sine Wave			
Output Distortion THD	THD ≤ 4% (Resistive load)	THD ≤ 5% (Resistive load)	THD ≤ 4% (Resistive load)	THD ≤ 4% (Resistive load)
Load Power factor	0.2~1 (Lad power ≤ Continuous output power)			
Rated Input Voltage	12VDC	24VDC	48VDC	48VDC
Input Voltage Range	10.8~16.0VDC	21.6~32.0VDC	43.2~64.0VDC	43.2~64VDC
Rated Output Efficiency ^①	>85.0%	>87.0%	>89.5%	>88.0%
Max. Output Efficiency ^②	>93.0% (30% loads)	>91.5% (30% loads)	>93.5% (30% loads)	>93.0% (30% loads)
Idle Current	<0.2A	<0.15A	<0.1A	<0.1A
No-load Current	<1.6A	<1A	<0.4A	<0.6A
USB Output	5VDC/Max.1A	5VDC/Max.1A	—	—
RS485 com.prt	5VDC/200mA			
Input Terminal	M10	M6		
Dimension (L*W*H)	550×274×148mm	521×274×148mm	516×231.5×123mm	521×274×148mm
Mounting Size (L*W)	525×145mm	495×145mm	490×145mm	495×145mm
Mounting Hole Size	Φ6mm			
Net Weight	11.60kg	9.00kg	7.35kg	10.65kg

Environment Parameters		Certification	
Work Temperature	-20°C~+60°C (Referto the Derating Curve)	safety	EN/IEC62109-1, UL1741, UL458, CSA C22.2#107.1
Storage Temperature	-35°C~+70°C	EMC (Eectromagnetic compatibility)	EN61000-6-1/EN61000-6-3
			FCC 47 CFR Part15, Subpart B
Relative Humidity	≤95% (N.C)	ROHS	IEC62321-3- 1
Enclosure	IP20	---	

① It is measured in the condition of continuous output power and rated input voltage.

② It means the max. output efficiency when the inverter is connected with different loads under the rated input voltage.

Remarks: Specifications are subject to change without notice.