

Home LV Inverter - SLH-G1



Home LV Inverter SLH - LG Energy Solution

L'inverter monofase ibrido di LG Energy Solution da **5,0 kW e 6,0 kW funziona in bassa tensione.**

è progettato per essere collegato alle batterie 48V di **LG Energy Solution Enblock 10C da 9.8kWh** e **LG Energy Solution Enblock 12C da 13.1kWh** per avere un pacchetto unico per lo storage residenziale

Dimensioni: 506x435x155mm

Peso: 21,5 Kg

Voltaggio nominale AC: 230V

Tipo di installazione: Nuovo & Retrofit

Garanzia: 10 anni

SLH-G1

	SLH-G1-050-GL	SLH-G1-060-GL
Battery Input Data		
Battery Type ¹⁾	Li-Ion	Li-Ion
Nominal Battery Voltage (V)	48	48
Battery Voltage Range (V)	40~60	40~60
Max. Continuous Charging Current (A) ¹⁾	120	120
Max. Continuous Discharging Current (A) ¹⁾	120	120
Max. Charge Power (W) ¹⁾	5,000	6,000
Max. Discharge Power (W)	5,300	6,300
PV String Input Data		
Max. Input Power (W) ²⁾	7,500	9,000
Max. Input Voltage (V)	600	600
MPPT Operating Voltage Range (V)	60~550	60~550
MPPT Voltage Range at Nominal Power (V)	200~500	220~500
Start-up Voltage (V)	58	58
Nominal Input Voltage (V)	360	360
Max. Input Current per MPPT (A)	16	16
Max. Short Circuit Current per MPPT (A)	23	23
Max. Backfeed Current to the Array (A)	0	0
Number of MPP Trackers	2	2
Number of Strings per MPPT	1	1
AC Output Data (On-grid)		
Nominal Apparent Power Output to Utility Grid (VA)	5,000 ³⁾	6,000 ³⁾
Max. Apparent Power Output to Utility Grid (VA)	5,000 ³⁾	6,000 ³⁾
Nominal Apparent Power from Utility Grid (VA)	5000	6000
Max. Apparent Power from Utility Grid (VA)	10000	10000
Nominal Output Voltage (V)	220/230/240	220/230/240
Output Voltage Range (V)	170~280	170~280
Nominal AC Grid Frequency (Hz)	50/60	50/60
AC Grid Frequency Range (Hz)	45~55 / 55~65	45~55 / 55~65
Max. AC Current Output to Utility Grid (A)	22.7	27.3
Max. AC Current From Utility Grid (A)	43.5	43.5
Nominal AC Current From Utility Grid (A)	21.7	26.1
Max. Output Fault Current (Peak and Duration) (A)	96A@3μs	96A@3μs
Inrush Current (Peak and Duration) (A)	96A@3μs	96A@3μs
Nominal Output Current (A)	21.7	26.1
Power Factor	~1 (Adjustable from 0.8 leading to 0.8 lagging)	
Max. Total Harmonic Distortion	<3%	<3%
Maximum Output Overcurrent Protection (A)	80	80
Type of Voltage (a.c. or d.c.)	a.c.	a.c.

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	SLH-G1-050-GL	SLH-G1-060-GL
AC Output Data (Back-up)		
Back-up Nominal Apparent Power (VA)	5000	6000
Max. Output Apparent Power (VA)	5,000(10,000 @10sec)	6,000(10,000 @10sec)
Nominal Output Current (A)	21.7	26.1
Max. Output Current (A)	22.7	27.3
Max. Output Fault Current (Peak and Duration) (A)	96A@3 μ s	96A@3 μ s
Inrush Current (Peak and Duration) (A)	96A@3 μ s	96A@3 μ s
Maximum Output Overcurrent Protection (A)	80	80
Nominal Output Voltage (V)	220/230/240	220/230/240
Nominal Output Frequency (Hz)	50/60	50/60
Output THDv (@Linear Load)	<3%	<3%
Efficiency		
Max. Efficiency	0.976	0.976
European Efficiency	0.967	0.967
CEC Efficiency	0.969	0.969
Max. Battery to AC Efficiency	0.955	0.955
MPPT Efficiency	0.999	0.999
Protection		
PV String Current Monitoring	Integrated	Integrated
PV Insulation Resistance Detection	Integrated	Integrated
Residual Current Monitoring	Integrated	Integrated
PV Reverse Polarity Protection	Integrated	Integrated
Anti-islanding Protection	Integrated	Integrated
AC Overcurrent Protection	Integrated	Integrated
AC Short Circuit Protection	Integrated	Integrated
AC Overvoltage Protection	Integrated	Integrated
DC Switch	Integrated	Integrated
DC Surge Protection	Type II	Type II
AC Surge Protection	Type III	Type III
AFCI	Optional	Optional
Remote Shutdown	Integrated	Integrated
PV String Current Monitoring	Integrated	Integrated

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Efficiency	
Operating Temperature Range (°C)	-25~+60
Relative Humidity	0~95%
Max. Operating Altitude (m)	3000 (>2000 derating)
Cooling Method	Natural Convection
User Interface	LED, WLAN+APP
Communication with BMS	CAN
Communication with Meter	RS485
Communication with Portal	WiFi / WiFi +LAN / 4G
Weight (kg)	21.5
Dimension (W×H×D mm)	505.9×434.9×154.8
Noise Emission (dB)	<30
Topology	Non-isolated
Self-consumption at Night (W)	<10
Ingress Protection Rating	IP65
DC Connector	MC4, VACONN Terminal
AC Connector	VACONN Terminal
Environmental Category	4K4H
Pollution Degree	III
Overvoltage Category	DC II / AC III
Protective Class	I
Storage Temperature (°C)	-40~+85
The Decisive Voltage Class (DVC)	Battery: A / PV: C / AC: C / Com: A
Mounting Method	Wall Mounted
Active Anti-islanding Method	SMS(Slip-mode frequency) +AFD
Type of Electrical Supply System	single phase
Country of Manufacture	China
Certification	
Grid Standards	AS4777.2-2020 ; NRS 097-2-1 ; CEI 0-21
Safety Regulation	IEC62109-1&2
EMC	IEC 61000-6-1/2/3/4; IEC61000-4-16/18/29; IEC 61000-2-2,CISPR 11; EN300328; EN301489; EN IEC 62311

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SLH-G1-060-GL

Image



- 1) The actual charge and discharge current / power also depends on the battery.
- 2) The max power is the actual power of PV
- 3) 4600 for VDE-AR-N4105 & NRS 097-2-1.



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Home HV Inverter - SHH-G1



Home HV Inverter SHH-G1 - LG Energy Solution

L'inverter monofase ibrido di LG Energy Solution da **5,0 kW e 6,0 KW funziona in alta tensione.**

è progettato per essere collegato alle batterie **10H PRIME** e **16H PRIME** per avere un pacchetto unico per lo storage residenziale

Dimensioni: 415x791x175mm

Peso: 32,3 Kg

Voltaggio nominale AC: 230V

Tipo di installazione: Nuovo & Retrofit

Garanzia: 10 anni

SHH-G1

	SHH-G1-050-GL	SHH-G1-060-GL
Battery Input Data		
Battery Type	Li-Ion	Li-Ion
Nominal Battery Voltage (V)	360	360
Battery Voltage Range (V) ¹⁾	80~495	80~495
Max. Continuous Charging Current (A)	50	50
Max. Continuous Discharging Current (A)	50	50
Max. Charge Power (W)	5,000	6,000
Max. Discharge Power (W)	5,250	6,300
PV String Input Data		
Max. Input Power (W)	7,500	9,000
Max. Input Voltage (V) ²⁾	600	600
MPPT Operating Voltage Range (V) ³⁾	80~550	80~550
MPPT Voltage Range at Nominal Power (V)	200~500	200~500
Start-up Voltage (V)	95	95
Nominal Input Voltage (V)	380	380
Max. Input Current per MPPT (A)	13	13
Max. Short Circuit Current per MPPT (A)	16.3	16.3
Max. Backfeed Current to The Array (A)	0	0
Number of MPP Trackers	3	4
Number of Strings per MPPT	1	1
AC Output Data (On-grid)		
Nominal Apparent Power Output to Utility Grid (VA)	5,000	6,000
Max. Apparent Power Output to Utility Grid (VA) ⁴⁾	5,000	6,000
Max. Apparent Power from Utility Grid (VA)	6,000	7,800
Nominal Output Voltage (V)	230	230
Nominal AC Grid Frequency (Hz)	50	50
Max. AC Current Output to Utility Grid (A)	23	26.3
Max. AC Current From Utility Grid (A)	27	34
Power Factor	~1 (Adjustable from 0.8 leading to 0.8 lagging)	
Max. Total Harmonic Distortion	<3%	<3%
AC Output Data (Back-up)		
Back-up Nominal Apparent Power (VA)	5,000	6,000
Max. Output Apparent Power (VA) ⁵⁾	5,000 (6,000@60s)	6,000 (7,800@60s)
Max. Output Current (A)	23	26.3
Nominal Output Voltage (V)	230 (±2%)	230 (±2%)
Nominal Output Frequency (Hz)	50 (±0.2%)	50 (±0.2%)
Output THDv (@Linear Load)	<3%	<3%

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	SHH-G1-050-GL	SHH-G1-060-GL
Efficiency		
Max. Efficiency	97.60%	97.60%
CEC Efficiency	97.00%	97.00%
Max. Battery to AC Efficiency	96.50%	96.50%
MPPT Efficiency	99.90%	99.90%
Protection		
PV Insulation Resistance Detection	Integrated	Integrated
Residual Current Monitoring	Integrated	Integrated
PV Reverse Polarity Protection	Integrated	Integrated
Battery Reverse Polarity Protection	Integrated	Integrated
Anti-islanding Protection	Integrated	Integrated
AC Overcurrent Protection	Integrated	Integrated
AC Short Circuit Protection	Integrated	Integrated
AC Overvoltage Protection	Integrated	Integrated
DC Switch	Integrated	Integrated
AC Switch	Integrated	Integrated
DC Surge Protection	Type II	Type II
AC Surge Protection	Type II	Type II
AFCI	Optional	Optional
Rapid Shutdown	Optional	Optional
General		
Operating Temperature Range (°C)	-35~+60	-35~+60
Relative Humidity	0~95%	0~95%
Max. Operating Altitude (m)	4000	4000
Cooling Method	Smart Fan Cooling	Smart Fan Cooling
User Interface	LED, WLAN+APP	LED, WLAN+APP
Communication with BMS	RS485, CAN	RS485, CAN
Communication with Meter	RS485	RS485
Communication with Portal	WiFi	WiFi
Weight (kg)	28.8	32.3
Dimension (W×H×D mm)	415×791×175	415×791×175
Noise Emission (dB)	<50	<50
Topology	Non-isolated	Non-isolated
Self-consumption at Night (W) ⁶⁾	<20	<20
Ingress Protection Rating	IP65	IP65
Mounting Method	Wall Mounted	Wall Mounted
Active Anti-islanding Method	AFDPF + AQDPF *7	AFDPF + AQDPF *7
Country of Manufacture	China	China

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Certification	
Grid Standards	NRS 097-2-1:2017
Safety Regulation	IEC62109-1&-2
EMC	EN 61000-6-1, EN 61000-6-2, EN 61000-6-3, EN 61000-6-4, EN 61000-3-11, EN 61000-3-12, BS EN 50065-1:2011

Image



- 1) Battery discharge/charge power limited by voltage.
- 2) Inverter will not work when PV input voltage $\geq 585V$.
- 3) When there is no battery connected, inverter starts feeding in only if string voltage is higher than 200V
- 4) The grid feed in power for VDE-AR-N 4105 and NRS097-2-1 is limited to 4600VA
- 5) Can be reached only if PV and battery power is enough.
- 6) No Back-up Output.


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