



**LEAPTON**  
SOLAR

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ENERGY SOLUTIONS

# SINGLE-PHASE HYBRID INVERTER

## 5KW

### ★ IP66 PROTECTION · TOUCH LCD

Dustproof and waterproof with intuitive color touchscreen for real-time monitoring.

### ★ 160A HIGH CURRENT

Delivers efficient charge/discharge performance and maximizes system output.

### ★ 6 SMART TIME PERIODS

6 programmable charge/discharge periods for precise energy management.

### ★ DIESEL GENERATOR SUPPORT

Enables direct generator-to-battery charging for hybrid systems.

### ★ 4MS SEAMLESS SWITCHING

Only 4ms transition ensures uninterrupted and stable power supply.



Version: 2026 V2

\* For the most up-to-date information, please refer to the latest version of this datasheet.



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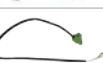








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MODEL	H5000-LS2-G5
<b>Battery Input Parameters</b>	
Battery Type	Lithium, Lead-acid
Rated Battery Voltage(V)	48
Battery Voltage Range	40-60
Max. Charging Current (A)	100
Max. Discharging Current (A)	100
Lithium Battery Charge Management	Adaptive BMS system
<b>PV Input Parameters</b>	
Max. PV Input Power (W)	7500
Max. PV Input Voltage (V)	510
Start-up Voltage (V)	80
PV Input Voltage Range (V)	125-510
MPPT Voltage Range (V)	100-425
MPPT Range at Full Load (V)	208-425
PV Nominal Input Voltage (V)	360
Max. Operating PV Input Current (A)	18+18
Max. PV Short-circuit Current (A)	27+27
Strings per MPPT	1+1
Max. Inverter Backfeed Current to The Array	0
<b>AC Input &amp; Output Parameters</b>	
Rated Input/ Output Active Power (W)	5000
Max. Input/ Output Apparent Power (VA)	5500
Rated Input/ Output Current (A)	22.8/21.8
Max. Input/ Output Current (A)	22.8/21.8
Max. Fault Output Current (AC) (A)	50
Max.Output Overcurrent Protection (AC)(A)	77
Peak power (off-grid)	1.1 times of rated power,60s
Inrush Current(Peak and Duration)(A)	96A@3us
Max.Continuous AC Passthrough(grid to load)(A)	35
Grid Bypass Current (A)	50
Power Factor	0.8 leading to 0.8 lagging
THDi (at Full Load)	THD<3%
DCI	<0.5%In
Switch Time(ON GRID TO OFF GRID)	4ms
Input/ Output Frequency(Hz)	50/45-55, 60/55-65
Input/ Output Voltage	220/230 0.85Un-1.1Un
Grid Type	L/N/PE
<b>Efficiency</b>	
Max. Efficiency	97.20%
Euro Efficiency	96.30%
Battery-to-AC Max Efficiency	95.40%
MPPT Efficiency	99%
<b>Protections</b>	
DC Reverse Polarity Protection	YES
Output Overcurrent Protection	YES
Output Overvoltage Protection	YES
Output Short Circuit Protection	YES
Temrmal Protection	YES
Leakage Current Monitoring	YES
Insulation Resistance Detection	YES
Anti-Islanding Protection	YES
Overload Protection	YES
Arc Fault Circuit Interrupter (AFCI)	Optional
RSD	Optional
DC Switch	YES
Ground Detection	YES
Surge Protection Level	TYPEII(DC/AC)
<b>User Interaction</b>	
Display	LCD
Communication Interface	485+CAN
Monitoring Method	WIFI/Bluetooth
<b>General Data</b>	
Operating Temperature	-40°C to 60°C, derating >45°C
Permissible Ambient Humidity	0-100%
Permissible Altitude (m)	2000m
Noise (dB)	30dB
Protection Rating	IP66
Topology	Non-isolated
Overvoltage Category	OVCII(DC),OVCIII(AC)
Dimensions	475 ± 1 × 335 ± 1 × 235 ± 1mm
Weight	18kg
Container Capacity (pcs)	20GP: 288   40HQ: 832
Cooling Method	Natural cooling
Installation method	Wall-mounted
Warranty	Standard Warranty: 5 years Extended Warranty (Optional): Up to 10 years, subject to terms and conditions
Grid Regulation	IEC 62116,IEC 61727,IEC 61683,EN 50549
Safety EMC/Standard	IEC/EN 61000-6-1/2/3/4,IEC/EN62109-1,IEC/EN 62109-2

## Packing List (Include)

No.	Picture	Description	Quantity
1		PV connector cable male end	3
2		PV connector cable female end	3
3		Option 1: WIFI data acquisition stick - Asia, Africa and Latin America/ Option 2: WIFI data acquisition stick - Europe	Option 1/ 2
4		CT	1
5		External NTC	1
6		Quick installation manual	1
7		Expansion screw	4
8		RJ45 connector	3
9		RNB open ground terminal	1
10		Peeping copper terminal	2
11		Barbed terminal	6
12		Ground screw	1
13		Three-way hexagon socket head screw	2
14		Accessories PE bag	5

## Packing List (Optional accessories, Sold separately)

No.	Picture	Description	Quantity
1		Guide rail	1
2		Three-way hexagon socket head screw	2
3		Quick disconnect device	1
4		Terminal fastener	2
5		RSD power supply cable	1
6		Electricity meter	1
7		AFCl board	1
8		AFCl CT	2
9		3mm hole for arc support plate	1
10		Single-way hexagonal stud	2
11		Arc detection communication cable	1
12		Three-way eleven-point head screw	3
13		Three-way hexagon socket head screw	4