



LEAPTON
SOLAR

LEAP FROM JAPAN TO THE WORLD

■ ■ ■ SWITCH YOUR LIFE

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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MODEL	H5000-LS2-G5	
Battery Input Parameters		
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	
PV Input Parameters		
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	
AC Input & Output Parameters		
Rated Input/ Output Active Power (W)	5000	
Max. Input/ Output Active Power (W)	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	
Efficiency		
Max. Efficiency	97.20%	
Euro Efficiency	96.30%	
Battery-to-AC Max Efficiency	95.40%	
MPPT Efficiency	99%	
Protections		
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)	
User Interaction		
Display	LCD	
Communication Interface	485+CAN	
Monitoring Method	WIFI/Bluetooth	
General Data		
Operating Temperature	-40℃ to 60℃, derating >45℃	
Permissible Ambient Humidity	0-100%	
Permissible Altitude (m)	2000m	
Noise (dB)	30dB	
Protection Rating	IP66	
Topology	Non-isolated	
Overvoltage Category	OVCI(DC),OVCI(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		AFCI board	1
8		AFCI 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