



LEAPTON
SOLAR

LEAP FROM JAPAN TO THE WORLD

■ ■ ■ SWITCH YOUR LIFE

ENERGY SOLUTIONS

SINGLE-PHASE HYBRID INVERTER

2.5KW/ 3KW/ 3.6KW/ 4KW/ 5KW/ 6KW/ 7.5KW/ 8KW

★ 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 V3

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



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MODEL	H2500-LS2-G5	H3000-LS2-G5	H3600-LS2-G5
Battery Input Parameters			
Battery Type	Lithium, Lead-acid	Lithium, Lead-acid	Lithium, Lead-acid
Rated Battery Voltage(V)	48	48	48
Battery Voltage Range	40-60	40-60	40-60
Max. Charging Current (A)	50	60	72
Max. Discharging Current (A)	50	60	72
Lithium Battery Charge Management	Adaptive BMS system	Adaptive BMS system	Adaptive BMS system
PV Input Parameters			
Max. PV Input Power (W)	3750	4500	5400
Max. PV Input Voltage (V)	510	510	510
Start-up Voltage (V)	80	80	80
PV Input Voltage Range (V)	125-510	125-510	125-510
MPPT Voltage Range (V)	100-425	100-425	100-425
MPPT Range at Full Load (V)	100-425	125-425	150-425
PV Nominal Input Voltage (V)	360	360	360
Max. Operating PV Input Current (A)	18+18	18+18	18+18
Max. PV Short-circuit Current (A)	27+27	27+27	27+27
Strings per MPPT	1+1	1+1	1+1
Max. Inverter Backfeed Current to The Array	0	0	0
AC Input & Output Parameters			
Rated Input/ Output Active Power (W)	2500	3000	3600
Max. Input/ Output Apparent Power (VA)	2750	3300	3960
Rated Input/ Output Current (A)	11.36/10.87	13.7/13.1	16.4/15.7
Max. Input/ Output Current (A)	11.36/10.87	13.7/13.1	16.4/15.7
Max. Fault Output Current (AC) (A)	25	30	36
Max.Output Overcurrent Protection (AC)(A)	77	77	77
Peak power (off-grid)	1.1 times of rated power,60s	1.1 times of rated power,60s	1.1 times of rated power,60s
Inrush Current(Peak and Duration)(A)	96A@3us	96A@3us	96A@3us
Max.Continuous AC Passthrough(grid to load)(A)	35	35	35
Grid Bypass Current (A)	50	50	50
Power Factor	0.8 leading to 0.8 lagging	0.8 leading to 0.8 lagging	0.8 leading to 0.8 lagging
THDi (at Full Load)	THD<3%	THD<3%	THD<3%
DCI	<0.5%In	<0.5%In	<0.5%In
Switch Time(ON GRID TO OFF GRID)	4ms	4ms	4ms
Input/ Output Frequency(Hz)	50/45-55, 60/55-65	50/45-55, 60/55-65	50/45-55, 60/55-65
Input/ Output Voltage	220/230 0.85Un-1.1Un	220/230 0.85Un-1.1Un	220/230 0.85Un-1.1Un
Grid Type	L/N/PE	L/N/PE	L/N/PE
Efficiency			
Max. Efficiency	96.90%	97.00%	97.10%
Euro Efficiency	96.30%	96.30%	96.30%
Battery-to-AC Max Efficiency	95.40%	95.40%	95.40%
MPPT Efficiency	99%	99%	99%
Protections			
DC Reverse Polarity Protection	YES	YES	YES
Output Overcurrent Protection	YES	YES	YES
Output Overvoltage Protection	YES	YES	YES
Output Short Circuit Protection	YES	YES	YES
Temrmal Protection	YES	YES	YES
Leakage Current Monitoring	YES	YES	YES
Insulation Resistance Detection	YES	YES	YES
Anti-Islanding Protection	YES	YES	YES
Overload Protection	YES	YES	YES
Arc Fault Circuit Interrupter (AFCI)	Optional	Optional	Optional
RSD	Optional	Optional	Optional
DC Switch	YES	YES	YES
Ground Detection	YES	YES	YES
Surge Protection Level	TYPEII(DC/AC)	TYPEII(DC/AC)	TYPEII(DC/AC)
User Interaction			
Display	LCD	LCD	LCD
Communication Interface	485+CAN	485+CAN	485+CAN
Monitoring Method	WIFI/Bluetooth	WIFI/Bluetooth	WIFI/Bluetooth
General Data			
Operating Temperature	-40℃ to 60℃, derating >45℃	-40℃ to 60℃, derating >45℃	-40℃ to 60℃, derating >45℃
Permissible Ambient Humidity	0-100%	0-100%	0-100%
Permissible Altitude (m)	2000m	2000m	2000m
Noise (dB)	30dB	30dB	30dB
Protection Rating	IP66	IP66	IP66
Topology	Non-isolated	Non-isolated	Non-isolated
Overvoltage Category	OVCII(DC),OVCIII(AC)	OVCII(DC),OVCIII(AC)	OVCII(DC),OVCIII(AC)
Dimensions	475±1×335±1×235±1mm	475±1×335±1×235±1mm	475±1×335±1×235±1mm
Weight	18kg	18kg	18kg
Container Capacity (pcs)	20GP: 288 40HQ: 832	20GP: 288 40HQ: 832	20GP: 288 40HQ: 832
Cooling Method	Natural cooling	Natural cooling	Natural cooling
Installation method	Wall-mounted	Wall-mounted	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, G99, RD 1699, RD 647, NTS Version 2.1, UNE 27001, UNE 27002		
Safety EMC/Standard	IEC/EN 61000-6-1/2/3/4, IEC/EN62109-1, IEC/EN 62109-2, EN303645, IEC 62920, EN 62477-1		

MODEL	H4000-LS2-G5	H5000-LS2-G5	H6000-LS2-G5
Battery Input Parameters			
Battery Type	Lithium, Lead-acid	Lithium, Lead-acid	Lithium, Lead-acid
Rated Battery Voltage(V)	48	48	48
Battery Voltage Range	40-60	40-60	40-60
Max. Charging Current (A)	80	100	120
Max. Discharging Current (A)	80	100	120
Lithium Battery Charge Management	Adaptive BMS system	Adaptive BMS system	Adaptive BMS system
PV Input Parameters			
Max. PV Input Power (W)	6000	7500	9000
Max. PV Input Voltage (V)	510	510	510
Start-up Voltage (V)	80	80	80
PV Input Voltage Range (V)	125-510	125-510	125-510
MPPT Voltage Range (V)	100-425	100-425	100-425
MPPT Range at Full Load (V)	170-425	208-425	250-425
PV Nominal Input Voltage (V)	360	360	360
Max. Operating PV Input Current (A)	18+18	18+18	18+18
Max. PV Short-circuit Current (A)	27+27	27+27	27+27
Strings per MPPT	1+1	1+1	1+1
Max. Inverter Backfeed Current to The Array	0	0	0
AC Input & Output Parameters			
Rated Input/ Output Active Power (W)	4000	5000	6000
Max. Input/ Output Apparent Power (VA)	4400	5500	6600
Rated Input/ Output Current (A)	18.18/17.39	22.8/21.8	27.3/26.1
Max. Input/ Output Current (A)	18.18/17.39	22.8/21.8	27.3/26.1
Max. Fault Output Current (AC) (A)	40	50	60
Max.Output Overcurrent Protection (AC)(A)	77	77	77
Peak power (off-grid)	1.1 times of rated power,60s	1.1 times of rated power,60s	1.1 times of rated power,60s
Inrush Current(Peak and Duration)(A)	96A@3us	96A@3us	96A@3us
Max.Continuous AC Passthrough(grid to load)(A)	35	35	40
Grid Bypass Current (A)	50	50	50
Power Factor	0.8 leading to 0.8 lagging	0.8 leading to 0.8 lagging	0.8 leading to 0.8 lagging
THDi (at Full Load)	THD<3%	THD<3%	THD<3%
DCI	<0.5%In	<0.5%In	<0.5%In
Switch Time(ON GRID TO OFF GRID)	4ms	4ms	4ms
Input/ Output Frequency(Hz)	50/45-55, 60/55-65	50/45-55, 60/55-65	50/45-55, 60/55-65
Input/ Output Voltage	220/230 0.85Un-1.1Un	220/230 0.85Un-1.1Un	220/230 0.85Un-1.1Un
Grid Type	L/N/PE	L/N/PE	L/N/PE
Efficiency			
Max. Efficiency	97.10%	97.20%	97.40%
Euro Efficiency	96.30%	96.30%	96.30%
Battery-to-AC Max Efficiency	95.40%	95.40%	95.40%
MPPT Efficiency	99%	99%	99%
Protections			
DC Reverse Polarity Protection	YES	YES	YES
Output Overcurrent Protection	YES	YES	YES
Output Overvoltage Protection	YES	YES	YES
Output Short Circuit Protection	YES	YES	YES
Temrmal Protection	YES	YES	YES
Leakage Current Monitoring	YES	YES	YES
Insulation Resistance Detection	YES	YES	YES
Anti-Islanding Protection	YES	YES	YES
Overload Protection	YES	YES	YES
Arc Fault Circuit Interrupter (AFCI)	Optional	Optional	Optional
RSD	Optional	Optional	Optional
DC Switch	YES	YES	YES
Ground Detection	YES	YES	YES
Surge Protection Level	TYPEII(DC/AC)	TYPEII(DC/AC)	TYPEII(DC/AC)
User Interaction			
Display	LCD	LCD	LCD
Communication Interface	485+CAN	485+CAN	485+CAN
Monitoring Method	WIFI/Bluetooth	WIFI/Bluetooth	WIFI/Bluetooth
General Data			
Operating Temperature	-40℃ to 60℃, derating >45℃	-40℃ to 60℃, derating >45℃	-40℃ to 60℃, derating >45℃
Permissible Ambient Humidity	0-100%	0-100%	0-100%
Permissible Altitude (m)	2000m	2000m	2000m
Noise (dB)	30dB	30dB	30dB
Protection Rating	IP66	IP66	IP66
Topology	Non-isolated	Non-isolated	Non-isolated
Overvoltage Category	OVCII(DC),OVCIII(AC)	OVCII(DC),OVCIII(AC)	OVCII(DC),OVCIII(AC)
Dimensions	475±1×335±1×235±1mm	475±1×335±1×235±1mm	475±1×335±1×235±1mm
Weight	18kg	18kg	18kg
Container Capacity (pcs)	20GP: 288 40HQ: 832	20GP: 288 40HQ: 832	20GP: 288 40HQ: 832
Cooling Method	Natural cooling	Natural cooling	Natural cooling
Installation method	Wall-mounted	Wall-mounted	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, G99, RD 1699, RD 647, NTS Version 2.1, UNE 27001, UNE 27002		
Safety EMC/Standard	IEC/EN 61000-6-1/2/3/4, IEC/EN62109-1, IEC/EN 62109-2, EN303645, IEC 62920, EN 62477-1		

MODEL	H7500-LS2-G5	H8000-LS2-G5
Battery Input Parameters		
Battery Type	Lithium, Lead-acid	Lithium, Lead-acid
Rated Battery Voltage(V)	48	48
Battery Voltage Range	40-60	40-60
Max. Charging Current (A)	150	160
Max. Discharging Current (A)	150	160
Lithium Battery Charge Management	Adaptive BMS system	Adaptive BMS system
PV Input Parameters		
Max. PV Input Power (W)	11250	12000
Max. PV Input Voltage (V)	510	510
Start-up Voltage (V)	80	80
PV Input Voltage Range (V)	125-510	125-510
MPPT Voltage Range (V)	100-425	100-425
MPPT Range at Full Load (V)	210-425	230-425
PV Nominal Input Voltage (V)	360	360
Max. Operating PV Input Current (A)	18+36	18+36
Max. PV Short-circuit Current (A)	27+54	27+54
Strings per MPPT	1+2	1+2
Max. Inverter Backfeed Current to The Array	0	0
AC Input & Output Parameters		
Rated Input/ Output Active Power (W)	7500	8000
Max. Input/ Output Apparent Power (VA)	8250	8800
Rated Input/ Output Current (A)	34.1/32.61	36.4/34.8
Max. Input/ Output Current (A)	34.1/32.61	36.4/34.8
Max. Fault Output Current (AC) (A)	75	80
Max.Output Overcurrent Protection (AC)(A)	145	145
Peak power (off-grid)	1.1 times of rated power,60s	1.1 times of rated power,60s
Inrush Current(Peak and Duration)(A)	96A@3us	96A@3us
Max.Continuous AC Passthrough(grid to load)(A)	50	50
Grid Bypass Current (A)	50	50
Power Factor	0.8 leading to 0.8 lagging	0.8 leading to 0.8 lagging
THDi (at Full Load)	THD<3%	THD<3%
DCI	<0.5%In	<0.5%In
Switch Time(ON GRID TO OFF GRID)	4ms	4ms
Input/ Output Frequency(Hz)	50/45-55, 60/55-65	50/45-55, 60/55-65
Input/ Output Voltage	220/230 0.85Un-1.1Un	220/230 0.85Un-1.1Un
Grid Type	L/N/PE	L/N/PE
Efficiency		
Max. Efficiency	97.50%	97.60%
Euro Efficiency	96.30%	96.50%
Battery-to-AC Max Efficiency	95.40%	95.50%
MPPT Efficiency	99%	99%
Protections		
DC Reverse Polarity Protection	YES	YES
Output Overcurrent Protection	YES	YES
Output Overvoltage Protection	YES	YES
Output Short Circuit Protection	YES	YES
Temrmal Protection	YES	YES
Leakage Current Monitoring	YES	YES
Insulation Resistance Detection	YES	YES
Anti-Islanding Protection	YES	YES
Overload Protection	YES	YES
Arc Fault Circuit Interrupter (AFCI)	Optional	Optional
RSD	Optional	Optional
DC Switch	YES	YES
Ground Detection	YES	YES
Surge Protection Level	TYPEII(DC/AC)	TYPEII(DC/AC)
User Interaction		
Display	LCD	LCD
Communication Interface	485+CAN	485+CAN
Monitoring Method	WIFI/Bluetooth	WIFI/Bluetooth
General Data		
Operating Temperature	-40℃ to 60℃, derating >45℃	-40℃ to 60℃, derating >45℃
Permissible Ambient Humidity	0-100%	0-100%
Permissible Altitude (m)	2000m	2000m
Noise (dB)	45dB	45dB
Protection Rating	IP66	IP66
Topology	Non-isolated	Non-isolated
Overvoltage Category	OVCII(DC),OVCIII(AC)	OVCII(DC),OVCIII(AC)
Dimensions	475±1×335±1×235±1mm	475±1×335±1×235±1mm
Weight	19kg	19kg
Container Capacity (pcs)	20GP: 288 40HQ: 832	20GP: 288 40HQ: 832
Cooling Method	Smart fan	Smart fan
Installation method	Wall-mounted	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, G99, RD 1699, RD 647, NTS Version 2.1, UNE 27001, UNE 27002	
Safety EMC/Standard	IEC/EN 61000-6-1/2/3/4, IEC/EN62109-1, IEC/EN 62109-2, EN303645, IEC 62920, EN 62477-1	

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