LEAPTON SOLAR

LEAP FROM JAPAN TO THE WORLD

SWITCH YOUR LIFE

ENERGY SOLUTIONS

HYBRID INVERTER

Three-Phase | Low-Voltage

3kW/4kW/5kW/6kW/8kW/10kW/12kW



★ IP66 PROTECTION · TOUCH LCD

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

★ 100% UNBALANCED THREE-PHASE OUTPUT

Ensures stable operation even with fully unbalanced three-phase loads.

★ ≤10ms GRID SWITCHING

Seamless on-grid/off-grid switching within 10ms to minimize power interruption.

★ 240A HIGH CURRENT

Delivers efficient charge/discharge performance and maximizes system output.



Version: 2026 V3

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

LEAPTON SOLAR

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MODEL	H3k-LT2-EU	H4k-LT2-EU	H5k-LT2-EU	H6k-LT2-EU	H8k-LT2-EU	H10k-LT2-EU	H12k-LT2-EU
POWER	3kw	4kw	5kw	6kw	8kw	10kw	12kw
Battery Input Parameters							
Battery Type	Lithium, Lead-acid						
Rated Battery Voltage(V)	48						
Battery Voltage Range	40-60						
Max. Charging Current (A)	70	95	120	135	190	210	240
Max. Discharging Current (A)	70	95	120	135	190	210	240
Lithium Battery Charge Management	Adaptive BMS system						
PV Input Parameters							
Max. PV Input Power (W)	4500	6000	7500	9000	12000	15000	18000
Max. PV Input Voltage (V)	1000						
Start-up Voltage (V)	180						
MPPT Voltage Range (V)	180-850						
MPPT Range at Full Load (V)	180-850	180-850	210-850	250-850	335-850	210-850	250-850
PV Nominal Input Voltage (V)	650						
Max. Operating PV Input Current (A)	18+18	18+18	18+18	18+18	18+18	36+36	36+36
Max. PV Short-circuit Current (A)	30+30	30+30	30+30	30+30	30+30	50+50	50+50
Strings per MPPT	2/(1+1)	2/(1+1)	2/(1+1)	2/(1+1)	2/(1+1)	2/(2+2)	2/(2+2)
AC Input & Output Parameters							
Rated Input/ Output Active Power (W)	3kw	4kw	5kw	6kw	8kw	10kw	12kw
Max. Input/ Output Apparent Power (VA)	3300	4400	5500	6600	8800	11000	13200
Rated Input/ Output Current (A)	4.6/4.4	6.1/5.8	7.6/7.3	9.1/8.7	12.2/11.6	15.2/14.5	18.2/17.4
Max. Input/ Output Current (A)	5/4.8	6.7/6.4	8.4/8	10/9.6	13.4/12.8	16.7/16	20/19.2
Grid Bypass Current (A)	40						
Peak power (off-grid)	1.6 times of rated power，10s						
Power Factor	-0.8~0.8						
Input/ Output Frequency(Hz)	50/45-55, 60/55-65						
Input/ Output Voltage	220/380V, 230/400V 0.85Un-1.1Un						
Grid Type	3L+N+PE						
THDi (at Full Load)	<3%						
DCI	<0.5% In						
Grid / Off-grid Transfer Time (ms)	<10ms						
Efficiency							
Max. Efficiency	97.60%						
Euro Efficiency	95.60%						
Battery-to-AC Max Efficiency	95.50%						
MPPT Efficiency	>99%						
Protections							
DC Reverse Polarity Protection	Integrated						
Output Overcurrent Protection	Integrated						
Output Overvoltage Protection	Integrated						
Output Short Circuit Protection	Integrated						
Leakage Current Monitoring	Integrated						
Insulation Resistance Detection	Integrated						
Anti-Islanding Protection	Integrated						
Overload Protection	Integrated						
Arc Fault Circuit Interrupter (AFCI)	optional						
DC Switch	Integrated						
RSD	optional						
Ground Detection	Integrated						
Surge Protection Level	TYPE II(DC), TYPE II(AC)						
User Interaction							
Display	LCD						
Communication Interface	RS485/CAN						
Monitoring Method	WIFI/Bluetooth						
General Data							
Operating Temperature	-40 to +60℃, >45℃ Derating						
Permissible Ambient Humidity	0-100%						
Permissible Altitude (m)	2000m						
Noise (dB)	⩽55						
Protection Rating	IP66						
Topology	Non-isolated						
Overvoltage Category	OVC II(DC), OVC III(AC)						
Dimensions	610*430*280mm (Excluding Connectors and Brackets)						
Container Capacity (pcs)	20GP: 180 | 40HQ: 396						
Weight	38.1kg						
Warranty	Standard Warranty: 5 years Extended Warranty (Optional): Up to 10 years, subject to terms and conditions						
Cooling Method	Intelligent Air Cooling						
Night-time Self-consumption (W)	<30W						
Grid Regulation	IEC 61727, IEC 62116, CEI 0-21, EN 50549, NRS 097, RD 140, UNE 217002,OVE-Richtlinie R25, G99, VDE-AR-N 4105						
Safety EMC/Standard	IEC/EN 61000-6-1/2/3/4, IEC/EN 62109-1, IEC/EN 62109-2						

Packing List (Include)

No.	Picture	Description	Quantity
1		Male PV Connector Cable	4
2		Female PV Connector Cable	4
3		Male PV Connector Pin	6
4		Female PV Connector Pin	6
5		Wi-Fi Data Logger	1
6		Grounding Screw	1
7		PE Accessory Bag	1
8		RNB Open-Ended Grounding Terminal	1
9		Quick Installation Guide	1
10		RJ45 Connector	6
11		Expansion Screw	4
12		Flat Bare Terminal	15
13		Hexagon Head Phillips Combination Battery Screw	2
14		Copper Ring Terminal	2
15		Lock	1
16		Copper Ring Terminal	2
17		CT	1
18		Hexagon Head Phillips Combination Battery Screw	2

Packing List (Optional accessories, Sold separately)

No.	Picture	Description	Quantity
1		AFCI Board	1
2		AFCI CT	1
3		Arc Fault Detection Communication Cable	1
4		Eleven-Character Combination Screw	3
5		DIN Rail	1
6		Hexagon Head Phillips Three-Combination Screw	6
7		Rapid Shutdown Device (RSD)	1
8		End Clamp	2
9		RSD Power Supply Cable	1
10		Electricity meter	1