



LEAPTON
SOLAR

LEAP FROM JAPAN TO THE WORLD

■ ■ ■ SWITCH YOUR LIFE

ENERGY SOLUTIONS

THREE-PHASE HYBRID INVERTER

10KW/15KW/20KW/ 25KW/ 29.9KW/ 30KW

★ DUAL 50A BATTERY PORTS

Two 50A battery interfaces enable fast charging and discharging for high power demand.

★ 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.

★ TYPE II DC SURGE PROTECTION

Provides reliable protection against DC-side surges and lightning.



Version: 2026 V4

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



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Model	H10K-HT2-G5	H15K-HT3-G5	H20K-HT3-G5
Battery Input Parameters			
Battery Type	Lithium	Lithium	Lithium
Number of Input Ports	1	1	2
Rated Battery Voltage (V)	500	500	500
Battery Voltage Range (V)	180-850	180-850	180-850
Max. Charging Current (A)	50	50	50*2
Max. Discharging Current (A)	50	50	50*2
Lithium Battery Charging Management System	BMS Lithium	BMS Lithium	BMS Lithium
PV Parameters			
Max. PV access power(W)	20000	30000	40000
Max. PV Input Power (W)	15000	22500	30000
Max. PV Input Voltage (V)	1000	1000	1000
Start-up Voltage (V)	180	180	180
MPPT Voltage Range (V)	180-850	180-850	180-850
Rated PV Input Voltage (V)	640V	640V	640V
Max. PV Operating Input Current (A)	36*2	36*3	36*3
Max. PV Short-circuit Current (A)	40*2	40*3	40*3
Number of MPPTs	2	3	3
Strings per MPPT	2	2	2
AC Input / Output Parameters			
Rated AC Input/ Output Power (W)	10000	15000	20000
Max. AC Output Apparent Power (VA)	11000	16500	22000
Max. AC Input Apparent Power (VA)	11000	16500	22000
Rated AC Input/ Output Current (A)	14.5/15.1	21.7/22.7	29.0/30.3
Max. AC Input/Output Current (A)	15.9/16.6	23.9/25.0	31.9/33.3
Power Factor (PF)	-0.8~0.8	-0.8~0.8	-0.8~0.8
AC Input/ Output Frequency (Hz)	50/60	50/60	50/60
AC Input/ Output Voltage (V)	3L+N+PE, 220/380, 230/400		
Total Harmonic Distortion of Current (THDi) @ Full Load (%)	<3%	<3%	<3%
DC Injection (DCi) @ Full Load (%)	<5%	<5%	<5%
Off-grid Output Parameters			
Rated Off-grid Apparent Power (VA)	10000	15000	20000
Max. Output Apparent Power (VA)	10000	15000	20000
Overload Capacity (× Rated, s)	1.5x for 10 s	1.5x for 10 s	1.5x for 10 s
Max. Output Current (A)	14.5/15.1	21.7/22.7	29.0/30.3
Rated Output Voltage (V)	3L+N+PE, 220/380, 230/400		
Rated Output Frequency (Hz)	45~55,55~65	45~55,55~65	45~55,55~65
Total Voltage Harmonic Distortion (@ Linear Load) (%)	<3%	<3%	<3%
Grid / Off-grid Transfer Time (ms)	<10ms	<10ms	<10ms
Efficiency			
Max. Efficiency (%)	98.5%	98.5%	98.5%
Max. Efficiency (Battery to AC) (%)	97.5%	97.5%	97.5%
MPPT Efficiency (%)	99.5%	99.5%	99.5%
Protections			
String Current Monitoring	Integrated	Integrated	Integrated
Insulation Resistance Detection	Integrated	Integrated	Integrated
Residual Current Monitoring	Integrated	Integrated	Integrated
Reverse Polarity Protection	Integrated	Integrated	Integrated
Anti-islanding Protection	Integrated	Integrated	Integrated
AC Overcurrent Protection	Integrated	Integrated	Integrated
AC Short-circuit Protection	Integrated	Integrated	Integrated
AC Overvoltage Protection	Integrated	Integrated	Integrated
DC Switch	Integrated	Integrated	Integrated
DC Surge Protection	Type II	Type II	Type II
AC Surge Protection	Type II	Type II	Type II
Arc Fault Circuit Interrupter (AFCI)	Optional	Optional	Optional
General Parameters			
Operating Temperature Range (° C)	-40~60℃	-40~60℃	-40~60℃
Relative Humidity (%)	0-100	0-100	0-100
Max. Operating Altitude (m)	2000	2000	2000
Cooling Method	Smart fan	Smart fan	Smart fan
Human – Machine Interface	LED Indicator	LED Indicator	LED Indicator
BMS Communication Method	RS485/CAN	RS485/CAN	RS485/CAN
Meter Communication Method	RS485	RS485	RS485
Monitoring Method	RS485, wifi & Ethernet	RS485, wifi & Ethernet	RS485, wifi & Ethernet
Weight (kg)	53	53	53
Dimensions (W × H × D, mm)	700*510*248	700*510*248	700*510*248
Topology	Non-isolated	Non-isolated	Non-isolated
Night-time Self-consumption (W)	<10W	<10W	<10W
Ingress Protection Rating (IP)	ip66	ip66	ip66
Warranty (Years)	5/10 years	5/10 years	5/10 years
Certification Standards	G99, VDE-AR-N 4105/VDE V 0124, EN 50549-1/EN 50549-10, VDE 0126/UTE C 15/VFR:2019, NTS 631/RD 1699/RD 244/UNE 206006/UNE 206007-1, CEI 0-21, C10/11, NRS 097-2-1, TOR, EFS 2018.2, IEC 62116, IEC 61727, IEC 60068, IEC 61683, EN 50530, MEA, PEA,PORTARIA Nº 140, DE 21 DE MARÇO DE 2022, IEC/EN 62109-1/-2, IEC/EN 61000-6-2/-4, EN 55011		

Model	H25K-HT3-G5	H29.9K-HT3-G5	H30K-HT3-G5
Battery Input Parameters			
Battery Type	Lithium	Lithium	Lithium
Number of Input Ports	2	2	2
Rated Battery Voltage (V)	500	500	500
Battery Voltage Range (V)	180-850	180-850	180-850
Max. Charging Current (A)	50*2	50*2	50*2
Max. Discharging Current (A)	50*2	50*2	50*2
Lithium Battery Charging Management System	BMS Lithium	BMS Lithium	BMS Lithium
PV Parameters			
Max. PV access power(W)	50000	59800	60000
Max. PV Input Power (W)	37500	44850	45000
Max. PV Input Voltage (V)	1000	1000	1000
Start-up Voltage (V)	180	180	180
MPPT Voltage Range (V)	180-850	180-850	180-850
Rated PV Input Voltage (V)	640V	640V	640V
Max. PV Operating Input Current (A)	36*3	36*3	36*3
Max. PV Short-circuit Current (A)	40*3	40*3	40*3
Number of MPPTs	3	3	3
Strings per MPPT	2	2	2
AC Input / Output Parameters			
Rated AC Input/ Output Power (W)	25000	29900	30000
Max. AC Output Apparent Power (VA)	27500	32890	33000
Max. AC Input Apparent Power (VA)	27500	32890	33000
Rated AC Input/ Output Current (A)	36.2/37.8	43.3/45.3	43.5/45.4
Max. AC Input/Output Current (A)	39.8/41.6	47.6/49.8	47.9/50
Power Factor (PF)	-0.8~0.8	-0.8~0.8	-0.8~0.8
AC Input/ Output Frequency (Hz)	50/60	50/60	50/60
AC Input/ Output Voltage (V)	3L+N+PE, 220/380, 230/400		
Total Harmonic Distortion of Current (THDi) @ Full Load (%)	<3%	<3%	<3%
DC Injection (DCi) @ Full Load (%)	<5%	<5%	<5%
Off-grid Output Parameters			
Rated Off-grid Apparent Power (VA)	25000	29900	30000
Max. Output Apparent Power (VA)	25000	29900	30000
Overload Capacity (× Rated, s)	1.5x for 10 s	1.5x for 10 s	1.5x for 10 s
Max. Output Current (A)	36.2/37.8	43.3/45.3	43.5/45.4
Rated Output Voltage (V)	3L+N+PE, 220/380, 230/400		
Rated Output Frequency (Hz)	45~55,55~65	45~55,55~65	45~55,55~65
Total Voltage Harmonic Distortion (@ Linear Load) (%)	<3%	<3%	<3%
Grid / Off-grid Transfer Time (ms)	<10ms	<10ms	<10ms
Efficiency			
Max. Efficiency (%)	98.5%	98.5%	98.5%
Max. Efficiency (Battery to AC) (%)	97.5%	97.5%	97.5%
MPPT Efficiency (%)	99.5%	99.5%	99.5%
Protections			
String Current Monitoring	Integrated	Integrated	Integrated
Insulation Resistance Detection	Integrated	Integrated	Integrated
Residual Current Monitoring	Integrated	Integrated	Integrated
Reverse Polarity Protection	Integrated	Integrated	Integrated
Anti-islanding Protection	Integrated	Integrated	Integrated
AC Overcurrent Protection	Integrated	Integrated	Integrated
AC Short-circuit Protection	Integrated	Integrated	Integrated
AC Overvoltage Protection	Integrated	Integrated	Integrated
DC Switch	Integrated	Integrated	Integrated
DC Surge Protection	Type II	Type II	Type II
AC Surge Protection	Type II	Type II	Type II
Arc Fault Circuit Interrupter (AFCI)	Optional	Optional	Optional
General Parameters			
Operating Temperature Range (° C)	-40~60℃	-40~60℃	-40~60℃
Relative Humidity (%)	0-100	0-100	0-100
Max. Operating Altitude (m)	2000	2000	2000
Cooling Method	Smart fan	Smart fan	Smart fan
Human – Machine Interface	LED Indicator	LED Indicator	LED Indicator
BMS Communication Method	RS485/CAN	RS485/CAN	RS485/CAN
Meter Communication Method	RS485	RS485	RS485
Monitoring Method	RS485, wifi & Ethernet	RS485, wifi & Ethernet	RS485, wifi & Ethernet
Weight (kg)	53	53	53
Dimensions (W × H × D, mm)	700*510*248	700*510*248	700*510*248
Topology	Non-isolated	Non-isolated	Non-isolated
Night-time Self-consumption (W)	<10W	<10W	<10W
Ingress Protection Rating (IP)	ip66	ip66	ip66
Warranty (Years)	5/10 years	5/10 years	5/10 years
Certification Standards	G99, VDE-AR-N 4105/VDE V 0124, EN 50549-1/EN 50549-10, VDE 0126/UTE C 15/VFR:2019, NTS 631/RD 1699/RD 244/UNE 206006/UNE 206007-1, CEI 0-21, C10/11, NRS 097-2-1, TOR, EIFS 2018.2, IEC 62116, IEC 61727, IEC 60068, IEC 61683, EN 50530, MEA, PEA,PORTARIA N° 140, DE 21 DE MARÇO DE 2022, IEC/EN 62109-1/-2, IEC/EN 61000-6-2/-4, EN 55011		

Packing List (Include)

No.	Picture	Description	Quantity
1		PV Connector Cable Male End	3
2		PV Connector Cable Female End	3
3		PV Connector Male Pin	6
4		PV Connector Female Pin	6
5		Cable Female Terminal	2
6		Machined Socket	2
7		Cable Male Terminal	2
8		Machined Pin	2
9		30k Wall Mounting Bracket	1
10		10-Pin Terminal Waterproof Cover	1
11		WiFi Data Logger - Europe	1
12		Quick Installation Manual	1
13		Expansion Screw	6
14		RJ45 Connector	6
15		RNB Open Grounding Terminal	12
16		Grounding 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		Phillips Truss Head Combination Screw	3
5		Three-Phase Energy Meter	1