



ALL-IN-ONE  
**FLEXIBLE INVERTER**  
HYBRID SOLUTION

**SHOWROOM AND R&D**

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# SPECIFICATION

## SINGLE PHASE MODELS

LIT-PHS4K-H8

LIT-PHS4K-H12

LIT-PHS4K-H24

INVERTER



BATTERY INPUT DATA	LITHV-S4K	LITHV-S6K	LITHV-S8K
BATTERY TYPE	LI-ION		
BATTERY VOLTAGE RANGE	80V - 500V		
MAX. CHARGING/DISCHARGING CURRENT	60A/60A		
RATED CHARGING/ DISCHARGING CURRENT	50A/50A		
CHARGING STRATEGY FOR LI-ION BATTERY	SELF-ADAPTION TO BMS		
COMMUNICATIONS	RS485, CAN		

PV STRING DC INPUT DATA			
RECOMMENDED MAX. PV POWER	8KW	12KW	16KW
MAX. INPUT VOLTAGE	600V		
START-UP VOLTAGE/MIN. INPUT DC OPERATION VOLTAGE	40 V/30 V		
MPPT VOLTAGE RANGE	80V - 580V		
MAX. INPUT CURRENT	18A/36A		
MAX. SHORT CIRCUIT CURRENT	22A/44A		
MPPT NUMBER	2		
STRINGS NUMBER PER MPPT	1/2		

AC OUTPUT DATA (ON-GRID SIDE)			
RATED OUTPUT POWER	4KW	6KW	8KW
RATED /MAX. APPARENT OUTPUT POWER	4KVA/4KVA	6KVA/6KVA	8KVA/8KVA
RATED GRID OUTPUT CURRENT	17.4A	26.1	34.8
MAX. OUTPUT CURRENT	17.4A	26.1	34.8
OPERATION PHASE	1P		
RATED GRID VOLTAGE/RANGE (L/N/PE)	220V/230V/240V / (180 - 300) V		
RATED GRID FREQUENCY	50HZ/60HZ		
POWER FACTOR	>0.99 (-0.8 TO +0.8)		
THDI	<3%		

AC OUTPUT DATA (BACK-UP/UPS SIDE)			
RATED OUTPUT POWER	4KW	6KW	8KW
PEAK APPARENT OUTPUT POWER, FOR 60S	8KW	9KW	9.6KW
BACK-UP/UPS SWITCH TIME	<10 MS		
RATED GRID VOLTAGE/RANGE (L/N/PE)	220V/230V/240V, 180 ~ 300 V		
RATED FREQUENCY	50HZ/60HZ		
RATED OUTPUT CURRENT	17.4A	26.1	34.8
THDV(@LINEAR LOAD)	<2%		

## EFFICIENCY

MAX. EFFICIENCY	98.60%
EU EFFICIENCY	98.10%

## PROTECTION

GROUND FAULT MONITORING	YES
OUTPUT OVER VOLTAGE PROTECTION	YES
ANTI-ISLANDING PROTECTION	YES
INTEGRATED AFCI	OPTIONAL
DC REVERSE-POLARITY PROTECTION	YES
AC SHORT CIRCUIT PROTECTION	YES
LEAKAGE CURRENT PROTECTION	YES
SURGE PROTECTION	YES
DC SWITCH (SOLAR)	YES
BATTERY INPUT REVERSE POLARITY PROTECTION	YES
OVER VOLTAGE CATEGORY	AC CLASS1II/PV CLASS11

## GENERAL DATA

DIMENSIONS (W*H*D)	411*401*166 MM
SHELL MATERIAL	ALUMINUM ALLOY
WEIGHT	17.7KG   17.5KG
OPERATING AMBIENT TEMPERATURE RANGE	-25~60°C
TOPOLOGY	TRANSFORMERLESS
INGRESS PROTECTION	IP66
COOLING CONCEPT	NATURAL CONVECTION   SMART FAN
MAX. OPERATION ALTITUDE	3000 M
GRID CONNECTION STANDARD	AS/NZS4777:2020, EN50549-10:2022, G98:2021, G99:2021, NC RFG, ABNT NBR 16150, VDE-AR-N 4105, CEIO-21, CEIO-16, RD1699, NA/EEA, C10:2019, PPDS:2021, TOR+R25, IEC61683, IEC61727&62161
SAFETY/EMC STANDARD	IEC-62109-1/-2, IEC-61000-6-1/-2/-3, NB/T32004
DC CONNECTION	MC4/D4
COMMUNICATIONS	WIFI, 4G, GPRS, BLUETOOTH, RS485, CAN

## HIGH VOLTAGE BOX

DC VOLTAGE OPERATING RANGE	80~1000V DC
OPERATION TEMPERATURE	-20~85°C

## BATTERY DATA

BATTERY TYPE	LFP
NOMINAL CAPACITY (AH)	42
RATED CHARGE/DISCHARGE CURRENT	0.5C/0.5C
MAX CHARGE/DISCHARGE CURRENT	1C/1C
DEPTH OF DISCHARGE	90%
CYCLE LIFE	6000
LIFETIME	10 YEARS
ENCLOSURE INGRESS PROTECTION	IP66
PROTECTIVE CLASS	1
CERTIFICATION & SAFETY STANDARD	UN38.3/MSDS/IEC62619/EN61000-6-1-3

## SYSTEM PARAMETER

H8

H12

H24

BATTERY SCHEMATIC



QTY.OF BATTERIES	2	3	6
CHARGE TEMPERATURE RANGE	0~53°C		
DISCHARGE TEMPERATURE RANGE	-10~53°C		
NOMINAL VOLTAGE(V)	192	288	576
BATTERY TOTAL ENERGY (WH)	8.06	12.09	24.18
DIMENSION(W*H*D) (MM)	630*1000*178(±3MM)	630*1370*178(±3MM)	TWO BLOCKS EACH 630*1370*178(±3MM)
WEIGHT (KG)	92KG	131KG	TWO BLOCKS EACH 131 KG

# SPECIFICATION

## THREE PHASE MODEL

## LIT-PHT10K-H2O

INVERTER



LITHV-T10K

## BATTERY INPUT DATA

BATTERY TYPE	LI-ION
BATTERY VOLTAGE RANGE	80V-800V
MAX. CHARGING/DISCHARGING CURRENT	60A/60A
RATED CHARGING /DISCHARGING CURRENT	50A/50A
CHARGING STRATEGY FOR LI-ION BATTERY	SELF-ADAPTION TO BMS
COMMUNICATIONS	RS485, CAN

## PV STRING DC INPUT DATA

RECOMMENDED MAX. PV POWER	20KW
MAX. INPUT VOLTAGE	1000V
START-UP VOLTAGE/MIN. INPUT DC OPERATION VOLTAGE	50 V/40 V
MPPT VOLTAGE RANGE	100V~900V
MAX. INPUT CURRENT	20A/20A/40A
MAX. SHORT CIRCUIT CURRENT	30A/30A/60A
MPPT NUMBER	3
STRINGS NUMBER PER MPPT	1/1/2

## AC OUTPUT DATA (ON-GRID SIDE)

RATED OUTPUT POWER	10KW
RATED /MAX. APPARENT OUTPUT POWER	10KVA/10KVA
RATED GRID OUTPUT CURRENT	14.5A
MAX. OUTPUT CURRENT	14.5A
OPERATION PHASE	3P
RATED GRID VOLTAGE (3P/N/PE)	220V/380V, 230V/400V, 240V/415, 312~520
RATED GRID FREQUENCY	50HZ/60HZ
POWER FACTOR	>0.99 (0.8 LEADING ~ 0.8 LAGGING)
THDI	<3%

## AC OUTPUT DATA (BACK-UP/UPS SIDE)

RATED OUTPUT POWER	10KW
PEAK APPARENT OUTPUT POWER FOR 60S	20KW
BACK-UP/UPS SWITCH TIME	<10 MS
RATED OUTPUT VOLTAGE	220V/380V, 230V/400V, 240V/415, 312~520
RATED FREQUENCY	50HZ/60HZ
RATED OUTPUT CURRENT	14.5A
THDV(@LINEAR LOAD)	<2%

## EFFICIENCY

MAX. EFFICIENCY	98.80%
EU EFFICIENCY	98.30%

# HYBRID SOLUTION

Graphical Representation

