



LHT- 12/15/20/25K F1

Three Phase Hybrid Inverter

- 100% unbalanced output, each phase;
Max. output up to 50% rated power
- DC couple and AC couple to retrofit existing solar system
- Max. 10pcs parallel for on-grid and off-grid operation:
Support multiple batteries parallel
- Max. charging/discharging current of 37A
- High voltage battery, higher efficiency
- 6 time periods for battery charging/discharging
- Support storing energy from diesel generator
- Color LCD touch screen, IP65 protection

MODEL	LHT-12K F1	LHT-15K F1	LHT-20K F1	LHT-25K F1
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Battery Input Data

Battery Type	Li-Ion			
Battery Voltage Range (V)	160~700			
Max. Charging Current (A)	37	37	37	50
Max. Discharging Current (A)	37	37	37	50
Number of battery input	2			
Charging Strategy for Li-Ion Battery	Self-adaption to BMS			

PV String Input Data

Max. DC Input Power (W)	15600	19500	26000	32500
Max. DC Input Voltage (V)	1000			
Start-up Voltage (V)	180			
MPPT Range (V)	150-850			
Full Load DC Voltage Range (V)	340-850	420-850	500-850	625-850
Rated DC Input Voltage (V)	600			
PV Input Current (A)	26+20	26+20	26+26	26+26
Max. PV Isc (A)	39+30	39+30	39+39	39+39
No. of MPP Trackers	2			
No. of Strings per MPP Tracker	2+1	2+1	2+2	2+2

AC Output Data

Rated AC Output and UPS Power (W)	12000	15000	20000	25000
Max. AC Output Power (W)	13200	15600	22000	27500
AC Output Rated Current (A)	18.2/17.4	22.8/21.8	30.4/29	37.9/36.3
Max. AC Output Rated Current (A)	20/19.2	25/24	33.4/31.9	41.7/39.9
Max. AC Current (A)	25	30	35	40
Max. Continuous AC Passthrough (A)	80			
Peak Power (off-grid)	1.5 time of rated power, 10 S			
Power Factor	0.8 leading to 0.8 lagging			
Output Frequency and Voltage	50/60Hz; 3L/N/PE 220/380, 230/400Vac			
Grid Type	Three Phase			
Total Harmonic Distortion (THD)	<3% (of nominal power)			
Generator input / Smart load / AC couple current (A)	18.2/80/18.2	22.8/80/22.8	30.4/80/30.4	37.9/80/37.9

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Efficiency

Max. Efficiency	97.6%			
Euro Efficiency	97.0%			
MPPT Efficiency	99.9%			

Protection

Integrated	PV Input Lightning Protection, Anti-islanding Protection, PV String Input Reverse Polarity Protection, Insulation Resistor Detection, Residual Current Monitoring Unit, Output Over Current Protection, Output Shorted Protection, Surge protection			
Output Over Voltage Protection	DC Type II/AC Type III			

General Data

Size (mm), w/h/d	408x638x237			
Weight (kg)	30.5			
Installation Style	Wall-mounted			
Cooling	Smart cooling			
Protection Degree	IP65			
Noise Emission	<55 dB			
Communication with BMS	RS485; CAN			
Warranty	10 years			
Operating Temperature Range (°C)	-40~60°C, >45°C derating			
Safety EMC / Standard	IEC/EN 61000-6-1/2/3/4, IEC/EN 62109-1, IEC/EN 62109-2, VDE4105, IEC61727/62116, VDE0126, AS4777.2, CEI 0 21, EN50549-1, G98, G99, C10-11, UNE217002, NBR16149/ NBR16150			
Grid Regulation	VDE4105, IEC61727/62116, VDE0126, AS4777.2, CEI 0 21, EN50549-1, G98, G99, C10-11, UNE217002, NBR16149/ NBR16150			