



LHT-HV-5/6/8/10K F2

Three Phase Hybrid Inverter

- Integrated 3 or 4 MPPTs for multiple array orientation
- Industry leading 50A / 10kW max charging/discharging rating
- Pre-made battery, meter and CAN cabling to reduce installation time
- Supports unbalanced and half-wave loads on both the grid and backup port
- Increased battery protection and operation features to extend battery life
- Automatic UPS switching & supports peak shaving mode

MODEL	LHT-HV-5K F2	LHT-HV-6K F2	LHT-HV-8K F2	LHT-HV-10K F2
-------	--------------	--------------	--------------	---------------

Input DC (PV side)				
Max. DC input power [kW]	8.0	9.6	12.8	16.0
Rated PV input voltage [V]	600			
Start-up voltage [V]	160			
MPPT voltage range [V]	200-850			
Max. input voltage [V]	1000			
Max. input current [A]	16*3	16*3	16*4	16*4
Max. short current [A]	24*3	24*3	24*4	24*4
No. of MPPT trackers	3	3	4	4
No. of input per MPPT	1	1	1	1

Battery input data				
Battery type	Lithium-ion			
Battery voltage range [V]	120 - 600			
Max. charging / discharging current [A]	25	25	50	50
Charging curve	3 Stages / Equalization			
Charging strategy for Li-ion battery	Self-adaption to BMS			

Output AC (back up)				
Rated output power [kW]	5	6	8	10
Max. apparent output power	8.0kVA, 60sec	9.6kVA, 60sec	12.8kVA, 60sec	16.0kVA, 60sec
Back-up switch time [ms]	< 10			
Rated output voltage [V]	3/N/PE 380/400			
Rated frequency [Hz]	50/60			
Max. output current [A]	7.6/7.2	9.1/8.7	12.2/11.5	15.2/14.4
THDv (@linear load)	< 2%			

Input AC (Grid side)				
Max. input power [kW]	7.5	9.0	12.0	15.0
Max. input current [A]	11.4	13.8	18.2	22.8
Rated output voltage [V]	3/N/PE 380/400			
Rated frequency [Hz]	50/60			

Features				
DC Connection	Staubli MC4 connector			
AC Connection	Quick connection plug			
Battery connection	Staubli MC4 connector			
Display	LED			
Communication	RS485; CAN; Ethernet; Optional: Wi-Fi, Cellular, LAN			

MODEL	LHT-HV-5K F2	LHT-HV-6K F2	LHT-HV-8K F2	LHT-HV-10K F2
-------	--------------	--------------	--------------	---------------

Output AC (grid side)				
Rated output power [kW]	5.0	6.0	8.0	10.0
Max apparent output power [kVA]	5.5	6.6	8.8	11.0
Operation phase	3/N/PE			
Rated grid voltage [V]	380/400			
Rated grid frequency [Hz]	50/60			
Rated grid output current [A]	7.6/7.2	9.1/7.7	12.2/11.5	16.7/15.8
Max. output current [A]	8.4/7.9	10.0/9.6	13.4/12.7	16.7/15.8
Power factor	> 0.99 (0.8 leading to 0.8 lagging)			
THDi	< 3%			

Protection				
Anti-islanding protection	Yes			
Output overcurrent protection	Yes			
Short current protection	Yes			
Integrated AFCI (DC arc-circuit protection)	Yes (1)			
DC reverse polarity protection	Yes			
PV overvoltage protection	Yes			
Battery reverse protection	Yes			

General data				
Dimensions [WxHxD mm]	600x500x230			
Weight [kg]	32.6			
Operating temperature range [°C]	-25 ~ +60			
Ingress protection	IP66			
Cooling concept	Natural convection			
Max. operation altitude [m]	4000			
Grid regulation	G98, G99, VDE-AR-N-4105, VDE V 0124, EN50549-1 VDE 0126/UTE C 15/VFR:2019, RD 1699/RD244/UNE206006/UNE 206007-1, CEI 0-21, C10/11, NRS 097-2-1, EIFS 2018_2, IEC61727, IEC60068, IEC 61683, EN50530, MEA, PEA, IEC/EN62109-1/-2, IEC/EN61000-6-1/-3, MEA, PEA			
Safety/EMC standard	IEC/EN 62109-1/2, EN 61000-6-1/2/3/4			

Efficiency				
Max. efficiency	97.9%	97.9%	98.0%	98.0%
Euro efficiency	96.8%	97.1%	97.4%	97.5%

(1) Activation required.