



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-terminated 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. Input Power (kW)	8.0	9.6	12.8	16.0
Rated PV Input Voltage (V)	600			
Max. Input Voltage (V)	1000			
Start-up Voltage (V)	160			
MPPT Voltage Range (V)	200~850			
Max. Input Current (A)	3x16	3x16	4x16	4x16
Max. Short Circuit Current (A)	3x24	3x24	4x24	4x24
No. of MPP Trackers	3	3	4	4
No. of Strings per MPP Tracker	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-adaptation to BMS			

Output AC (Back up)

Rated Output Power (kW)	5	6	8	10
Max. Apparent Output Power	8kVA, 60 sec	9.6kVA, 60 sec	12.8kVA, 60 sec	16.0kVA, 60 sec
Back-up Switch Time (ms)	<10			
Rated Output Voltage (V)/ Frequency (Hz)	3/N/PE 380/400; 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
Rated. Input Current (A)	11.4	13.8	18.2	22.8
Rated Input Voltage (V)/Frequency (Hz)	3/N/PE 380/400; 50/60			

Features

DC Connection	Stäubli MC4 EVO 2			
AC Connection	Quick Connection Plug			
Battery Connection	Quick Connection Plug			
Display	LED			
Communication	RS485; CAN; Ethernet; Optional: Wi-Fi, Cellular, LAN, BT			

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)	5.0	6.0	8.0	10.0
Rated Grid Voltage (V)/Frequency (Hz)	3/N/PE 380/400; 50/60			
Rated Grid Output Current (A)	7.6/7.2	9.1/8.7	12.2/11.5	15.2/14.4
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, EFS 2018 .2, IEC61727, IEC60068, IEC 61683, EN50530, MEA, PEA, IEC/EN62109-1/-2, IEC/EN61000-6-1/-3			
Safety EMC / Standard	IEC/EN 62109-1/2, EN 61000-6-1/2/3/4			

Efficiency

Max. Efficiency	97.87%	97.91%	98.03%	98.04%
Euro Efficiency	96.77%	97.1%	97.41%	97.51%

1) Activation required.