



LHT-HV-12/15/20K F2

Three Phase Hybrid Inverter

- Integrated 4 MPPTs for multiple array orientation
- Supports dual backup ports for intelligent control of critical loads
- Supports a maximum input current of 20A, making it ideal for all high-power PV
- Supports peak shaving features in "self-consumption" and "sell to grid" modes
- 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-12K F2	LHT-HV-15K F2	LHT-HV-20K F2
Input DC (PV side)			
Max. Input Power (kW)	19.2	24.0	32.0
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)	20		
Max. Short Circuit Current (A)	30		
No.of MPP Trackers	4		
Max. input power per MPPT (kW)	9		
Battery Input Data			
Battery Type	Lithium-ion		
Battery Voltage Range (V)	120~800		
Max. Charging/Discharging Current (A)	50.0		
Communication	CAN/RS485		
Charging Strategy for Li-Ion Battery	Self-adaptation to BMS		
Output AC (Back up)			
Rated Output Power (kW)	12.0	15.0	20.0
Max. Apparent Output Power (kVA)	12.0	15.0	20.0
Rated Grid Frequency	50 Hz / 60 Hz		
Rated Output Voltage (V)	3/N/PE, 380 V / 400 V		
Max. Output Current (A)	18.2 / 17.3	22.8 / 21.7	30.4 / 28.9
THDv (@linear load)	< 3%		
Input AC (Grid side)			
Max. Input Power (kW)	18.0	22.5	30.0
Rated. Input Current (A)	27.3 / 26	34.2 / 32.5	45.6 / 43.3
Rated Input Voltage (V)	3/N/PE, 380 V / 400 V		
Features			
DC Connection	MC4 connector		
AC Connection	OT terminal		
Battery Connection	OT terminal		
Display	LED		
Communication	CAN, RS485, Ethernet, Optional: Wi-Fi, Cellular		

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Output AC (Grid side)			
Rated Output Power (kW)	12.0	15.0	20.0
Max. Apparent Output Power (kVA)	12.0	15.0	20.0
Rated Grid Voltage (V)	3/N/PE, 380 V / 400 V		
Rated Grid Output Current (A)	18.2 / 17.3	22.8 / 21.7	30.4 / 28.9
Max. Output Current (A)	18.2 / 17.3	22.8 / 21.7	30.4 / 28.9
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	Yes		
DC Reverse-Polarity Protection	Yes		
PV Overvoltage Protection	Yes		
Battery Reverse Protection	Yes		
General Data			
Dimensions (WxHxD mm)	599*546*243		
Weight (kg)	31.0	31.7	
Operating Temperature Range (°C)	-25~60		
Ingress Protection	IP66		
Cooling Concept	Intelligent redundant fan-cooling		
Max. Operation Altitude (m)	4000		
Grid Regulation	V EN 50549-1, VDE4105 CEI 0-21, CEI 0-16, NC-RFG TypeB, NRS 097-2-1 ED 2.1		
Safety EMC / Standard	IEC/EN 62109-1/-2, IEC/EN 61000-6-1/-3, IEC 61000-2		
Efficiency			
Max. Efficiency	97.7%		
Euro Efficiency	97.5%		