



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 MPP 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 |

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| 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/NFR: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.