



HYBRID INVERTER

Three Phase:

HP3-5K/6K/8K/10K/12KD2 (EN)

HP3-5K/6K/8K/10K/12K/15KL2 (UL)

As the core of the energy storage solution, LIVOLTEK three phase hybrid inverter offers flexible and social-able solutions for both residential and commercial applications. With the ability of scalable battery storage, the high-voltage inverter facilitate powerful energy backup and also present high self-consumption with optimized built-in EMS to reduce energy cost.

High Performance

- 200% PV oversizing and up to 110% AC output
- 200% overload for backup loads
- Seamless on grid/off grid switching time <10ms

Flexible Application

- Max. 10 units in parallel for on-grid and off-grid operation
- 100% unbalanced output
- Compatible with generator

Safe and Reliable

- Type II AC/DC surge protection
- AFCI function optional
- IP65 Ingress protection

Safe and Reliable

- Peak shaving mode
- Support half-wave loads
- Remote control and upgrade

HYBRID INVERTER

THREE-PHASE: HP3-5K/6K/8K/9.9K/10K/12K D2 (EN)

INVERTER

Model	HP3-5KD2	HP3-6KD2	HP3-8KD2	HP3-9.9KD2	HP3-10KD2	HP3-12KD2
PV Input						
Max. PV Input Power	10000Wp	12000Wp	16000Wp	20000Wp	20000Wp	24000Wp
Max. PV Input Voltage	1000V					
Nominal Input Voltage	600V					
MPPT Voltage Range	150 V - 950 V					
Start-up Voltage	180V					
No. of MPPTs/Strings per MPPT	2 / (1+1)			2 / (2+1)		
Max. PV Current	16A / 16A			32A / 16A		
Max. Short Circuit Current	20 / 20A			40A / 20A		
AC @ Grid						
Max. AC Input Power	21000W	21000W	21000W	21000W	21000W	21000W
Max. AC Input Current	31.0A	31.0A	31.0A	31.0A	31.0A	31.0A
Nominal AC Output Power	5000W	6000W	8000W	10000W	10000W	12000W
Nominal AC Voltage	3W + N + PE, 380V, 400V, 415V					
AC Frequency	45 - 55Hz / 55 - 65Hz					
Max. AC Current	7.6A	9.1A	12.1A	15.1A	15.2A	18.2A
THDi @Rated Power[%]	< 3%					
Power Factor	-1 (Adjustable from 0.8 Leading to 0.8 Lagging)					
EPS Output @ Off Grid						
Nominal EPS Power	5000W	6000W	8000W	9900W	10000W	12000W
EPS Peak Power (10s)	5500W	6600W	8800W	10900W	11000W	13200W
Nominal Output Voltage	3W + N + PE, 220 / 380V, 230 / 400V, 240 / 415V					
Nominal Frequency	50Hz / 60Hz					
Nominal Output Current	7.3A	8.7A	11.6A	14.4A	14.5A	17.4A
THDv @Linear Power[%]	< 3%					
Battery Input						
Battery Type	Lithium					
Battery Voltage	100V - 700 V					
Max. Charge/Discharge Current	50A / 50A					
Communication with BMS	CAN					
Efficiency						
Max. Efficiency	98.20%	98.20%	98.20%	98.20%	98.20%	98.20%
Euro Efficiency	97.20%	97.50%	97.90%	97.90%	97.90%	97.90%
General Data						
Dimension (W*H*D)	540*470*210 mm					
Weight	26kg					
Cooling	Natural Convection					
Protection Rating	IP65					
Mounting Method	Wall-mounted					
Operating Temperature Range	-25 °C to +60 °C					
Display	LED & APP					
Communication	Wi-Fi / DO / DI / RS485					
Protection Function	Islanding Protection, PV DC Reverse Polarity Protection, DC Short Circuit Protection Device, AC Short Circuit Protection Device, PV DC Overcurrent Protection, AC Overcurrent Protection, Leakage Current Protection, Over/Under Frequency Protection, Over/Under Voltage Protection, Insulation Resistance Protection, Over-Temperature Protection, AC Current Imbalance Protection, Arc Detection Protection, Buzzer Warning					
Standard	EN 62109-1/2, EN 62920:2017+A11+A1, EN IEC 61000-6-1/2/3/4, IEC61727, IEC62116, EN50549-1, CEI 0-21, PTPIREE 2021.04.28 (EU) 2016_631 (RfG)), UNE 217001/217002, NTS Type A, VDE-AR-N-4105:2018, DIN VDE V 0124-100:2020-06, IEC 61683					

HYBRID INVERTER

HP3-5K/6K/8K/10K/12K/15K L2

INVERTER

Model	HP3-5KL2	HP3-6KL2	HP3-8KL2	HP3-10KL2	HP3-12KL2	HP3-15KL2
PV Input						
Max. PV Input Power	10000Wp	12000Wp	16000Wp	20000Wp	24000Wp	30000Wp
Max. PV Input Voltage	1000V					
Nominal Input Voltage	380V					
MPPT Voltage Range	150 V - 950 V					
Start-up Voltage	180 V					
No. of MPPTs/Strings per MPPT	2 / (2+1)		3 / (2+2+1)		3 / (2+2+2)	
Max. PV Current	32A / 16A		32A / 32A / 16A		32A / 32A / 32A	
Max. Short Circuit Current	40A / 20A		40A / 40A / 20A		40A / 40A / 40A	
AC @ Grid						
Nominal AC Output Power	5000W	6000W	8000W	10000W	12000W	15000W
Max. AC Input Power	12000W	12000W	17000W	23000W	23000W	23000W
Max. AC Input Current	31.0A	31.0A	43.5A	58.0A	58.0A	58.0A
Nominal AC Output Power	5000W	6000W	8000W	10000W	12000W	15000W
Nominal AC Voltage	3W+N+PE, 208/220/230V					
AC Frequency	50 Hz / 60 Hz					
Max. AC Current	13.2A	15.8A	21.0A	26.3A	31.5A	39.4A
THDi @Rated Power[%]	< 3%					
Power Factor	-1 (Adjustable from 0.8 Leading to 0.8 Lagging)					
EPS Output @ Off Grid						
Nominal EPS Power	5000W	6000W	8000W	10000W	12000W	15000W
EPS Peak Power (10s)	10.7kW		20.0kW		22.7kW	
Nominal Output Voltage	3W+N+PE, 208/220/230V					
Nominal Frequency	50Hz / 60Hz					
Nominal Output Current	12.6A	15.1A	20.1A	25.2A	30.2A	37.7A
THDv @Linear Power[%]	< 3%					
Battery Input						
Battery Type	Lithium					
Battery Voltage	100V - 700 V					
Max. Charge/Discharge Current	50A / 50A					
Communication with BMS	CAN					
Efficiency						
Max. Efficiency	98.10%	98.10%	98.10%	98.20%	98.20%	98.20%
Euro Efficiency	97.70%	97.70%	97.70%	97.80%	97.80%	97.80%
General Data						
Dimension (W*H*D)	540*470*210 mm			595*485*235 mm		
Weight	26kg			38kg		
Cooling	Natural Convection			Intelligent Fan		
Protection Rating	IP65					
Mounting Method	Wall-mounted					
Operating Temperature Range	-25 °C to +60 °C					
Display	LED & APP					
Communication	Wi-Fi / DO / DI / RS485					
Protection Function	Islanding Protection, PV DC Reverse Polarity Protection, DC Short Circuit Protection Device, AC Short Circuit Protection Device, PV DC Overcurrent Protection, AC Overcurrent Protection, Leakage Current Protection, Over/Under Frequency Protection, Over/Under Voltage Protection, Insulation Resistance Protection, Over-Temperature Protection, AC Current Imbalance Protection, Arc Detection Protection, Buzzer Warning					
Standard	EN 62109-1/2, EN 62920:2017+A11+A1, EN IEC 61000-6-1/2/3/4, IEC61727, IEC62116					