

## HYBRID INVERTER

### Three Phase:

HP3-15K/20K/25K/30KT2 (EN)

HP3-15K/20K/25K/30K/36KM2 (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



\* Indoor/Outdoor, IP65

\* Indoor, IP20

# HYBRID INVERTER

## HP3-15K/20K/25K/30KT2 (EN)

INVERTER

Model	HP3-14.9KT2	HP3-15KT2	HP3-20KT2	HP3-25KT2	HP3-29.9KT2	HP3-30KT2
<b>PV Input</b>						
Max. PV Input Power	30000Wp	30000Wp	40000Wp	50000Wp	60000Wp	60000Wp
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	3 / (2+2+1)			3 / (2+2+2)		
Max. PV Current	32A / 32A / 16A			32A / 32A / 32A		
Max. Short Circuit Current	40A / 40A / 20A			40A / 40A / 40A		
<b>AC @ Grid</b>						
Max. AC Input Power	40000W	40000W	40000W	40000W	40000W	40000W
Max. AC Input Current	58.0A	58.0A	58.0A	58.0A	58.0A	58.0A
Nominal AC Output Power	14900W	15000W	20000W	25000W	29900W	30000W
Nominal AC Voltage	3W + N + PE, 380V, 400V, 415V					
AC Frequency	45 - 55Hz / 55 - 65Hz					
Max. AC Current	22.6A	22.8A	30.4A	37.9A	45.3A	45.5A
THDi @Rated Power[%]	< 3%					
Power Factor	-1 (Adjustable from 0.8 Leading to 0.8 Lagging)					
<b>EPS Output @ Off Grid</b>						
Nominal EPS Power	14900W	15000W	20000W	25000W	29900W	30000W
EPS Peak Power (10s)	16400VA	16500VA	22000VA	27500VA	32900VA	33000VA
Nominal Output Voltage	3W + N + PE, 220 / 380V, 230 / 400V, 240 / 415V					
Nominal Frequency	50Hz / 60Hz					
Nominal Output Current	21.6A	21.8A	29.0A	36.3A	43.2A	43.5A
THDv @Linear Power[%]	< 3%					
<b>Battery Input</b>						
Battery Type	Lithium					
Battery Voltage	100V - 700 V					
Max. Charge/Discharge Current	50A / 50A					
Communication with BMS	CAN					
<b>Efficiency</b>						
Max. Efficiency	98.20%	98.20%	98.20%	98.40%	98.40%	98.40%
Euro Efficiency	97.90%	97.90%	97.90%	97.90%	97.90%	97.90%
<b>General Data</b>						
Dimension (W*H*D)	595*485*235 mm					
Weight	39kg					
Cooling	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					
<b>Standard</b>						
Safety	EN 62109-1, EN 62109-2, IEC 62109-1, IEC 62109-2, IEC 61727, IEC 62116, IEC 61683					
EMC	EN 62920, EN IEC 61000-6-1, EN IEC 61000-6-2, EN IEC 61000-6-3, EN IEC 61000-6-4, EN 55011, EN 61000-3-12, IEC 61000-3-11, IEC 61000-6-1, IEC 61000-6-2, IEC 61000-6-3, IEC 61000-6-4, CISPR 11, IEC 61000-3-3					
Grid Regulation	EN 50549-1, NRS 097-2-1, Engineering Recommendation G99, G100/1-2, CEI 0-21, CEI 0-16, UNE 217001, ITC-BT-40, UNE 217002, TED/749/2020, RD 413/2014, RD 1699/2011, UE 2016/631, NTS Type A, VDE-AR-N-4105, DIN VDE V 0124-100, IEC 63027					

# HYBRID INVERTER

## HP3-15K/20K/25K/30K/36K M2

INVERTER

Model	HP3-15KM2	HP3-20KM2	HP3-25KM2	HP3-30KM2	HP3-36KM2
<b>PV Input</b>					
Max. PV Input Power	30000Wp	40000Wp	50000Wp	60000Wp	60000Wp
Max. PV Input Voltage	1000V				
Nominal Input Voltage	720V				
MPPT Voltage Range	150 V - 950 V				
Start-up Voltage	180 V				
No. of MPPTs/Strings per MPPT	3 / (2+2+1)			3 / (2+2+2)	
Max. PV Current	32A / 32A / 16A			32A / 32A / 32A	
Max. Short Circuit Current	40A / 40A / 20A			40A / 40A / 40A	
<b>AC @ Grid</b>					
Max. AC Input Power	36000W	48000W	48000W	48000W	48000W
Max. AC Input Current	43.5A	58.0A	58.0A	58.0A	58.0A
Nominal AC Output Power	15000W	20000W	25000W	30000W	36000W
Nominal AC Voltage	3W + N + PE, 277 / 480V				
AC Frequency	50Hz / 60Hz				
Max. AC Current	18.1A	24.1A	30.1A	36.1A	43.4A
THDi @Rated Power[%]	<3%				
Power Factor	-1 (Adjustable from 0.8 Leading to 0.8 Lagging)				
<b>EPS Output @ Off Grid</b>					
Nominal EPS Power	15000W	20000W	25000W	30000W	36000W
EPS Peak Power (10s)	42.0kW			47.3kW	
Nominal Output Voltage	3W + N + PE, 277 / 480V				
Nominal Frequency	50Hz / 60Hz				
Nominal Output Current	18.1A	24.1A	30.1A	36.1A	43.3A
THDv @Linear Power[%]	< 3%				
<b>Battery Input</b>					
Battery Type	Lithium				
Battery Voltage	100V - 700 V				
Max. Charge/Discharge Current	50A / 50A				
Communication with BMS	CAN				
<b>Efficiency</b>					
Max. Efficiency	98.10%	98.10%	98.10%	98.20%	98.20%
Euro Efficiency	97.70%	97.70%	97.70%	97.80%	97.80%
<b>General Data</b>					
Dimension (W*H*D)	595*485*235 mm				
Weight	38kg				
Cooling	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				
<b>Standard</b>					
Standrad	EN 62109-1/2, EN 62920:2017+A11+A1, EN IEC 61000-6-1/2/3/4, IEC61727, IEC62116				