

## HYBRID INVERTER

### Three Phase: HP3-40/50/60K S1

As the core of the energy storage solution, LIVOLTEK three phase hybrid inverter offers flexible and scalable 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 Efficiency & Reliability

- 120% overload capacity (10s) in off-grid mode
- Supports max. 45A PV input current, compatible with high-power solar panels
- Seamless on-grid/off-grid switching time <10ms
- Supports up to 200% PV oversize, 100% three-phase unbalanced output

#### Flexibility & Reliability

- Supports up to 10 units in parallel for grid-tied and off-grid operation
- Diesel generator compatibility; flexible multi-energy integration
- Dual independent battery inputs for flexible configuration
- Flexible DC/AC PV coupling for retrofits and expansion

#### Safe & Intelligent

- Support AFCI, Type II AC/DC surge protection
- Supports intelligent terminal temperature detection
- Intelligent load management and remote OTA

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### HP3-40/50/60K S1

INVERTER

Model	HP3-40KS1	HP3-50KS1	HP3-60KS1
<b>PV Input</b>			
Max. PV Input Power	80kWp	100kWp	120kWp
Max. PV Input Voltage	1100V		
Nominal Input Voltage	600V		
MPPT Voltage Range	150 ~ 1000 V		
No. of MPPTs/Strings per MPPT	5/(2+2+2+2)	5/(2+2+2+2)	5/(2+2+2+2)
Max. PV Current	45/45A/45A/45A/45A	45/45A/45A/45A/45A	45/45A/45A/45A/45A
Max. Short Circuit Current	55A/55A/55A/55A/55A	55A/55A/55A/55A/55A	55A/55A/55A/55A/55A
<b>AC Output @ Grid</b>			
Nominal AC Output Power	40kW	50kW	60kW
Max. Apparent Outout Power	44kVA	55kVA	66kVA
Max. AC Input Power	120kW		
Nominal AC Voltage	3W+N+PE, 380V, 400V, 415V		
AC Frequency	50 / 60 Hz		
Rated Output Current	60.6A	75.8A	90.9A
Max. Output Current	66.7A	83.4A	100A
THDi (Rated Power)	< 3%		
Power Factor	-1 (Adjustable from 0.8 Leading to 0.8 Lagging)		
<b>AC Input @ Generator</b>			
Max. AC Input Power	50kW	60kW	80kW
Nominal AC Voltage	3W+N+PE, 380V, 400V, 415V		
AC Frequency	50 / 60 Hz		
<b>EPS Output @ Off Grid</b>			
Nominal EPS Power	44kW	55kW	66kW
EPS Peak Power (10s)	52.8kW	66kW	80kW
Nominal Output Voltage	3W+N+PE, 220/380V, 230/400V, 240/415V		
Nominal Frequency	50 / 60 Hz		
Nominal Output Current	66.7A	83.4A	100A
THDv (linear load)	< 2%		
Switch Time	< 10ms		
<b>Battery Input</b>			
Battery Type	Lithium		
Battery Voltage Range	120 ~ 900 V		
Max. Charge/Discharge Current <sup>1</sup>	80A*2 / 80A*2		
Communication with BMS	CAN		
<b>Efficiency</b>			
Max. Efficiency	98.40%		
Euro Efficiency	98.00%		
<b>Protection</b>			
PV Reverse Polarity Protection	Support		
Anti-islanding Protection	Support		
AC Overcurrent Protection	Support		
AC Short Circuit Protection	Support		
Leakage Current Protection	Support		
DC Switch	Support		
Battery Input Reverse Polarity Protection	Support		
Surge Protection	DC Type II / AC Type II		
AFCI	Support		
<b>General Data</b>			
Topology	Transformerless		
Dimension (W*H*D)	620*895*300 mm		
Weight	80kg		
Noise(Typical)	<65dB		
Altitude	2000m		
Cooling	Intelligent Fan		
Protection Rating	IP66		
Mounting Method	Wall-mounted		
Operating Temperature Range	-25 to +60°C		
Ambient Humidity	0 ~ 95%RH (Non-condensing)		
Display	LED & APP		
Communication	Wi-Fi/DO/DI/RS485/CAN		
Standrad	IEC61727/62116, EN50549-1/10, IEC/EN 62109-1/-2, EN61000-6-1, EN61000-6-2, EN61000-6-3, EN61000-6-4, IEC/EN 62920		

\*1 Supporting parallel 160A input.