

## EK70 HS5 Single Phase All-in-One Solution

Your Ultimate Smart Home Butler



## Smart Home Energy Ecosystem

The eManager 5.0 and elekeeper 5.0 connect PV, storage, EV charger, smart plug, heat pump, and more for fully automated whole-home energy management.



## Easy, Fast, and Smart Installation

- Modular design with blind-mate connectors, no complex external cabling.
- Innovative Wireless-pro meter, providing longer range, more stable connectivity, and wiring-free installation.
- Effortless App commissioning features 3-step initialization and One Click Self-diagnosis (Meter & CT Phase Auto Adjustment)
- No backup retrofit required: 63A bypass.



## Total Peace of Mind with Multi-layer Protection

- Battery Protection
  - Full-coverage temperature sensor
  - Thermal aerosol fire suppression
  - Decompression valve
- System Protection
  - DC ground-fault protection
  - Grid fault protection
  - DC Bus protection

## Future-Ready Scaling with Ultimate Battery Performance

- Built-in DCDC optimizer
- Fully independent charge & discharge
- Eliminates wooden barrel effect
- Seamless capacity expansion
- Built to Last: 10,000 cycles\*\*\* with premium 314Ah cell



## AI-powered Energy Higher returns for every kWh

- **elekeeper 5.0**
  - AI Keeper – Intelligent energy manager
  - AI Care – AI-powered system health guardian
  - AI Designer – Intelligent plant design platform
  - VPP ready – empower a connected energy ecosystem

- **AI Saving 3.0**
  - AI + Multi-scenario (Peak Shaving, EV Charging, VPP, Temporary Scheduling...)



MODEL	EK70 HS5-5K-S3-X*	EK70 HS5-6K-S3-X*	EK70 HS5-6K-S3-X*-IE	EK70 HS5-8K-S3-X*	EK70 HS5-10K-S4-X*
<b>Input (PV)</b>					
Recommended max. PV power [W]	10000	12000	12000	16000	20000
Max. input voltage [V]	600				
MPPT voltage range [V]	50~550				
Operating Voltage Range [V]	50~600				
Start-up voltage [V]	80				
Nominal DC input voltage [V]	360				
Max. input current per MPPT [A]	20				
Max. short-circuit current per MPPT [A]	25				
Number of MPP trackers	3			4	
No. of Strings per MPP Tracker	1+1+1			1+1+1+1	
<b>Input (DC Battery)</b>					
Battery Type	LiFePO4				
Battery Voltage Range [V]	300~600				
Communication Interface for BAT	CAN				
Max. Battery Quantity in one system	6				
<b>AC Output/Input (On Grid)</b>					
Rated output power [W]	4999	6000	5750	8000	10000
Rated apparent power [VA]	4999	6000	5750	8000	10000
Max. apparent power [VA]	4999	6600	5750	8800	11000
Rated. output current [A]	21.7	26.1	25.0	34.8	43.5
Max. output current [A]	21.7	28.7	25.0	38.3	47.8
Rated output/input voltage [V]	L+N+PE, 220, 230, 240				
Rated AC grid frequency [Hz]	50/60				
Max. input current** [A]	63				
Adjustable power factor	0.8 leading~ 0.8 lagging				
Total current harmonic distortion	< 3%				
<b>AC Output (Back-up)</b>					
Max. Output Apparent Power [VA]	5000	6000	6000	8000	10000
Max. output current [A]	21.7	26.1	26.1	34.8	43.5
Peak Output Apparent Power [VA]	10000, 10s	12000, 10s	12000, 10s	16000, 10s	20000, 10s
Rated output voltage [V]	L+N+PE, 220, 230, 240				
Rated AC grid frequency [Hz]	50/60				
Adjustable power factor	0.8 leading~ 0.8 lagging				
Total current harmonic distortion	< 3%				
Switch time [ms]	≤10				
<b>Efficiency</b>					
Euro Efficiency	97.6%				
Max. Efficiency	98.0%				
<b>Protection</b>					
Insulation Monitoring	Integrated				
Residual Current Monitoring	Integrated				
DC Reverse Polarity Protection	Integrated				
Anti-islanding Protection	AFD				
AC Short-circuit Protection	Integrated				
AC Overcurrent/Overvoltage Protection	Integrated				
DC Switch	Integrated				
surge protection	Type II DC/AC				
AFCI	Integrated				
<b>General Data</b>					
Inverter topology	Non-isolation				
Protective class	I				
Overvoltage category	DC II, AC III				
Dimensions (W / H / D) [mm]	Inverter: 835 / 350 / 270; Battery pack: 835 / 270 / 270; Battery base: 835 / 70 - 80 / 270				
Weight [kg]	Inverter: 39.5; Battery pack:BU5-6.0-TV: 60.4; BU5-7.0-TV: 68; BU5-9.0-TV: 79.2; Battery base: 8				
Operating temperature range [°C]	-30 ~ + 50 °C				
Relative humidity range	5% ~ 95% Non-condensing				
Corrosion resistance grade	C4				
Max. operating altitude [m]	3000				
Cooling	Smart air cooling				
Degree of protection	IP66				
Communication	WLAN / Fast Ethernet / RS485 / eSolar 4G pro /eSolar AIO3 pro				
Standard	EN 62109-1/2, EN 61000-6-2/4, EN 50438, EN 50549, C10/11, IEC 62116, IEC 61727, RD 1699, RD 413, UNE 206006, UNE 206007, NTS, CEI 0-16, CEI 0-21, AS 4777.2, NBR 16149, NBR 16150 VDE-AR-N 4105, VDE 0126-1-1				
Warranty [Year]	Refer to the warranty policy				

\* X for battery system configuration: X=6/7/9/12/14/15/16/18/21/24/25/27/30/28/35/36/40/42/45/50/54 kWh; each number presents the energy storage capacity for different models; For battery combinations and ratings refer to the battery combination datasheet.  
 \*\* The built-in 63A bypass function enables the whole-house backup power, and the current can be configured on the elekeeper App.  
 \*\*\* Provided by the battery manufacturer. Test conditions: 25±2°C, 0.5C charge and discharge rate, SOH 60%.