

EK70 HS5 Single Phase All-in-One Solution

Your Ultimate Smart Home Butler



Smart Home Energy Ecosystem

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 | • System Protection |
| Full-coverage temperature sensor | DC ground-fault protection |
| Thermal aerosol fire suppression | Grid fault protection |
| Decompression valve | 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 HS5-8K-S3-X*	EK70 HS5-10K-S4-X*
Input (PV)			
Recommended max. PV power [W]	10000	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+1
Input (DC Battery)			
Battery Type		LiFePO4	
Battery Voltage Range [V]		350-600	
Communication Interface for BAT		CAN	
Max. Battery Quantity in one system		6	
AC Output/Input (On Grid)			
Rated output power [W]	4999	8000	9999
Rated apperant power [VA]	4999	8000	9999
Max. apparent power [VA]	4999	8800	9999
Rated. output current [A]	21.7	34.8	43.5
Max. output current [A]	21.7	38.3	43.5
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%	
AC Output (Back-up)			
Max. Output Apparent Power [VA]	5000	8000	10000
Max. output current [A]	21.7	34.8	43.5
Peak Output Apparent Power [VA]	10000,10s	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	
Efficiency			
Euro Efficiency		97.6%	
Max. Efficiency		98.0%	
Protection			
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	
General Data			
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:EK70 BU5-6.0-TV: 60.4 EK70 BU5-7.0-TV: 71.7 EK70 BU5-9.0-TV: 79.2		
	Battery base: 8		
Operating temperature range [°C]	Charging temperature: 0°C to +50°C Discharging temperature: -10 °C to + 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	IEC62109-1/2, IEC62040, IEC62477,EN61000-6-1/2/3/4, IEC62619,AS4777.2, SA TS 5398		
Warranty [Year]	Refer to the warranty policy		

* X for battery system configuration: X=14/16/18/21/25/27/28/35/36/42/45/50/54 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%.