



Hybrid inverter series ES-ICH08/ HV

Power classes: 8 kW - 12 kW; Three-phase, 3 MPPT, High Voltage

Product Name Code: ES-ICH08-8K-3/HV | ES-ICH08-10K-3/HV | ES-ICH08-12K-3/HV

3 independent MPPTs for flexible and higher kWp PV array design

Intelligent work modes and customisable battery management for DOD / Time of Use / Power setting

Max. 16 A input current, ideal for bifacial and large PV modules

Quick & easy-to-install with basic tools
| Compact wall mount design | Simple
battery and smart meter interfaces for
quick and secure installation

Up to 150 % PV array oversizing
for higher yields | Available with or
without asymmetrical power output |
UPS level switching time < 10 ms |
IP66 rated design for outdoor use



10-year product warranty

For full warranty terms see
www.electroluxsolar.com

Electrolux is a registered trademark used
under license from AB Electrolux (publ)

Technical Datasheet

	ES-ICH08-8k-3/HV	ES-ICH08-10k-3/HV	ES-ICH08-12k-3/HV				
PV input	Max. PV array power	12000 Wp	15000 Wp	18000 Wp			
	Max. input voltage	1100 V					
	MPP voltage range / rated input voltage	200 V to 950 V / 630 V					
	Min. input voltage / start voltage	60 V / 180 V					
	No. of independent MPPT trackers / strings per MPPT input	3 / 1					
	Max. input current / Max. power per MPP tracker	16 A	10000 W	16 A	10000 W	16 A	10000 W
	Max. short-circuit current per MPP tracker	24 A					
Battery input	Battery voltage range	120 V to 600 V					
	Max. charging / discharging power	8000 W	10000 W	12000 W			
	Max. charging current / Max. discharging current	30 A					
	Battery type	LiFePO4					
AC input	Rated grid voltage	3/N/PE, 220 / 380 V; 230 / 400 V; 240 / 415 V					
	Rated grid frequency	50 Hz / 60 Hz					
	Max. input power from grid	16000 W	20000 W	24000 W			
	Max. input current from grid	23.2 A	29.0 A	34.8 A			
AC output	AC voltage range / Nominal AC voltage	270V to 480V / 3/N/PE, 220 V / 380 V; 230 V / 400 V; 240 V / 415 V					
	Rated AC grid frequency	50 Hz / 60 Hz					
	AC grid frequency range	45 - 55 Hz / 55 - 65 Hz					
	Rated apparent power	8000 VA	10000 VA	12000 VA			
	Max. apparent power	8000 VA	10000 VA	12000 VA			
	Rated grid output current (@400 V)	11.6 A	14.5 A	17.4 A			
	Max. grid output current(@400 V)	12.8 A	16.0 A	19.2 A			
	Harmonics THDi (@ Nominal power)	< 3 % (of nominal power)					
EPS output	Nominal output voltage	3/N/PE, 220 V / 380 V; 230 V / 400 V; 240 V / 415 V					
	Nominal output frequency	50 Hz / 60 Hz					
	Rated apparent power	8000 VA	10000 VA	12000 VA			
	Rated current (@400 V)	11.6 A	14.5 A	17.4 A			
	Max. current (@400 V, continuous on-grid / off-grid)	23.2 A	11.6 A	29.0 A	14.5 A	34.8 A	17.4 A
	Max. power on each phase(@400 V, continuous on-grid/off-grid)	5333 W	2667 W	6667 W	3333 W	8000 W	4000 W
	Peak output apparent power(@400 V, continuous on-grid/off-grid up to 10s)	16000 VA	16000 VA	20000 VA	20000 VA	24000 VA	24000 VA
	Max. switch time	< 10 ms					
	Output THDv (@ Linear load)	2 %					
	Efficiency	MPPT efficiency	99.9 %				
Euro efficiency / Max. efficiency		97.2 % / 98.0 %	97.9 % / 98.4 %				
Safety protection	DC surge protection(Type II, according to EN/IEC 61643-11)	Available					
	Insulation resistance detection	Available					
	PV string input reverse polarity protection	Available					
	Battery input reverse polarity protection	Available					
	Ground fault monitoring	Available					
	Residual current monitoring unit	Available					
	AC short circuit protection	Available					
	Anti-islanding protection	Available					
General data	Power factor at rated power / adjustable displacement	1 / 0.8 leading to 0.8 lagging					
	Dimensions (W * H * D)	545 mm * 465 mm * 205 mm					
	Weight	26 kg					
	Operating temperature range	-25 °C ... +60 °C					
	Cooling concept	Natural convection					
	Noise emission	< 35 dB					
	Degree of protection (as per IEC 60529)	IP66					
	Max. relative humidity	100 %					
	Max. operating altitude	4000 m					
	Features	User interface	LED & App				
BMS interface		CAN					
Smart meter interface		RS485					
Internet communication interfaces		Wifi / LAN					
Digital output (dry contact) / No. of outputs		Available/ 2					
Digital input (dry contact) / No. of inputs		Available/ 4					
Integrated power control / export power control	Available/ Available						

Version: 2025.02.V1-EN