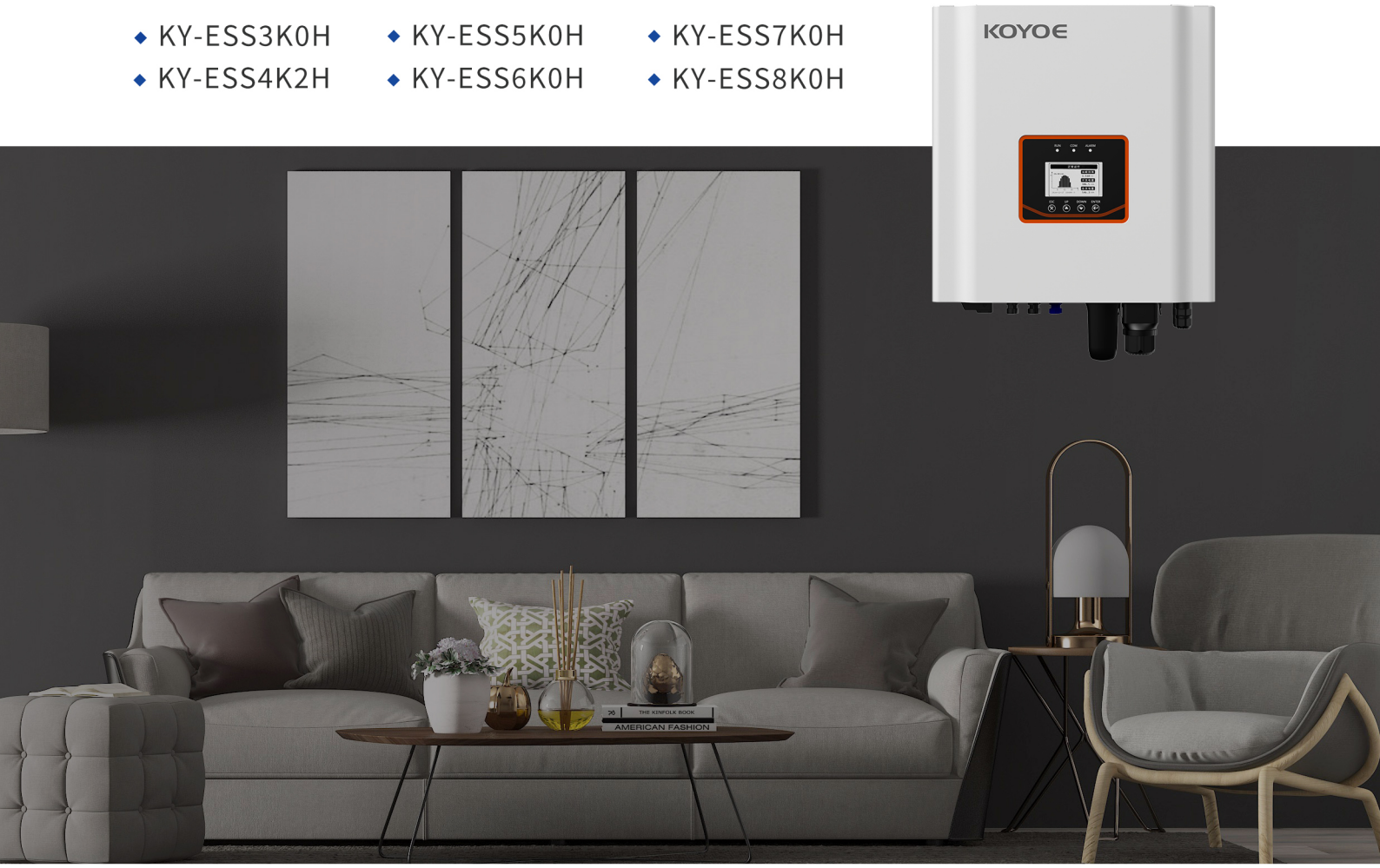
KOYOE

Applicable to C&I Distributed Energy Storage Scenarios Product Models

3-8kW Single-phase/Hybrid Inverter

Product Models

- KY-ESS3K0H
- KY-ESS5K0H
- KY-ESS7K0H
- KY-ESS4K2H
- KY-ESS6K0H
- KY-ESS8K0H



Compatibility

Integrate PV and energy storageto match a variety of batteries

Intelligent switching

Support emergency power supply, single machine and off-grid seamless switching

Fault recording, remote recovery

Real-time fault recording, remote analysis and recovery

Wide voltage range

Ultra-wide PV voltage range from **80V-500V**
Ultra-wide battery voltage range from **85V-450V**

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*Specifications are subject to the actual nameplate of the product

Model	KY-ESS3K0H	KY-ESS4K2H	KY-ESS5K0H	KY-ESS6K0H	KY-ESS7K0H	KY-ESS8K0H
PV Input Data						
Max. Input Power[W]	5100	7140	8500	10200	11900	13600
Max. Input Voltage[V]	590					
Operating Voltage Range[V]	80~500					
Max. Input Current[A]	16/16					
Max. Short Circuit Current[A]	20/20					
Number of MPPT Trackers	2					
Number of Strings per MPPT	1/1					
MPPT Tracking Efficiency [%]	99.99					
Battery Data						
Battery Voltage Range[V]	85~450					
Input Number	1					
Max.Charge/Discharge Current[A]	30/30					
Max.Charge/Discharge Power[W]	3000	4200	5000	6000	7000	8000
Battery Type	Li-ion/Lead-acid					
AC Data(On-grid Interface)						
Nominal Output Power[W]	3000	4200	5000	6000	7000	8000
Max. Apparent Output Power[VA]	3300	4600	5500	6600	7700	8800
Max Input Power[W]	3300	4600	5500	6600	7700	8800
Nominal Vollage[Vac]	230,L/N/PE					
Nominal Frequency[Hz]	50/60					
Max. Output Current[A]	13	18.3	21.7	26	30.4	34.8
Grid Bypass Current[A]	13	18.3	21.7	26	30.4	34.8
Power Factor	~1(0.8 lead to 0.8 lag can be set)					
Total Harmonic Distortion[%]	<3					
AC Data(Off-grid Interface)						
Nominal Output Power[W]	3000	4200	5000	6000	7000	8000
Max. Apparent Output Power [VA]	3300	4600	5500	6600	7700	8800
Nominal Output Voltage[Vac]	230,L/N/PE					
Nominal Output Frequency[Hz]	50/60					
Max. Output Single-phase Apparent Power[VA]	14.3	20	23.9	28.6	33.4	38.2
Peak Output Apparent Power[VA](60s)	3600	5040	6000	7200	8400	8400
Peak Output Apparent Power[VA](10s)	5500	5500	7500	9000	9000	9000
On/Off grid switching time [ms]	<10					
AC Data(Diesel Gen.)						
Nominal Voltage[Vac]	230,L/N/PE					
Nominal Frequency[Hz]	50/60					
Nominal Input Apparent Power[VA]	3000	4200	5000	6000	7000	8000
Efficiency						
Max. Efficiency[%]	98.2					
European Efficiency[%]	97.1					
Protective Devices						
DC Reverse Polarity Protection	integrated					
Over Current Protection	integrated					
Anti islanding protection	integrated					
AC short circuit protection	integrated					
Leakage current protection	integrated					
Insulation resistance testing	integrated					
Surge protection	DC Type II / AC Type III					
General Data						
Operating Temperature Range[℃]	-25~60 (>45 derating)					
Operating Altitude[m]	<4000					
Maximum noise index [dB]	<40					
Topology	Transtormerless isolation					
Cooling Method	Natural convection					
Degree of Protection	IP65					
Relative Humidity[%]	0~95，No condensation					
DC Connection Type	Amphenol/Phoenix					
AC Connection Type	Plug in connector					
Interaction	LCD,RS485					
Cloud Communication	RS485(WIFI/4G optional)					
BMS Communication	CAN					
Meter Communication	RS485					
Installation Method	Wall-mounted					
Dimension(W*D*H)[mm]	390*407*192					
Weight[kg]	17					
Certification						
Safety Standards	IEC/EN 62109-1/-2					
EMC Standards	IEC/EN 61000-6-1/-3					
On-grid Standard	CEI 0-21,G98,G99,NRS097-2-1:2017 ,UNE 217001/UNE 217002/NTS631					

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