

DATASHEET

Single Phase Hybrid / AC Inverter

KH7 / KH8 / KH9 / KH10 / KH10.5 KA7 / KA8 / KA9 / KA10 / KA10.5



K SERIES

SINGLE PHASE INVERTER

Harness the power of the sun day and night with the ground-breaking range of Hybrid & AC inverters from Fox ESS.

Full of advanced features and compatible with our very own range of high-voltage batteries, the hybrid range from Fox ESS is a new class of Inverter.





Fox ESS storage solutions are available with advanced and intuitive app based remote control and monitoring functionality.



Easy Installation

Flexible configuration, plug and play set-up, built-in fuse protection.



High Voltage

Includes high-voltage batteries for maximum round-trip effciency.



IP65 Rated

Engineered to last with maximum flexibility. Suitable for outdoor installation.



Remote Monitoring

Monitor your system remotely via smartphone app or web portal.



Expand your system easily by simply adding additional batteries. Seven batteries can be installed in series, providing up to 33.24kWh of storage capacity.

For more about the Fox ESS range, visit: WWW.FOX-ESS.COM









Model	KH7 KA7		KH8 KA8	KH9 KA9	KH10 KA10	KH10.5 KA10.5
ELECTRICAL CHARACTERISTICS						
Battery Voltage Bange [V]				Li-lon 85 ~ 480		
Battery Voltage Range [V] Recommended Battery Voltage [V]				300VDC		
Max. Charge Current [A]				50		
Max. Discharge Current [A]				50		
Communication Interfaces Reverse Connect Protection				CAN / RS485 YES		
INPUT PV (FOR KH ONLY)				TES		
Max. Recommended DC Power [W]	10500		12000	13500	15000	15000
Max. DC Voltage [V]				600		
Norminal DC Operating Voltage [V]				360		
Max. Input Current (Input A / Input B) [A] Max. Short Circuit Current (Input A / Input B) [A]		16 / 16 / 16 ^[1] 20 / 20 / 20			16 / 16 / 16 / 16 ^[1] 20 / 20 / 20 / 20	
Max. Inverter Backfeed Current to the Array [mA]		20 / 20 / 20		0	20 20 20 20	
MPPT Voltage Range [V]				80 ~ 500		
Start-up Voltage [V]				75		
No. of MPP Trackers Strings Per MPP Tracker		3		1	4	
DC Disconnection Switch				Optional		
OUTPUT AC				·		
Norminal AC Power [VA]	7000		8000	9000	10000	10500
Max. Apparent AC power [VA] Rated Grid Voltage (AC Voltage Range) [V]	7700		8800	9900 220 / 230 / 240 (180 ~ 270)	10500	10500
Rated Grid Frequency [Hz]				50 / 60, ±5		
Norminal AC Current [A]	30.4		34.8	39.1	43.5	45.7
Max. AC Current [A]	33.5		38.3	43.0	45.7	47.7
Displacement Power Factor Total Harmonic Distortion (THDi, Rated Power) [%]				0.8 Leading to 0.8 Lagging <3		
INPUT AC						
Max AC Power [VA]	14000		16000	18000	18000	18000
Max. AC Current [A]	60.9		69.6	78.3	78.3	78.3
Rated Grid Voltage (AC Voltage Range) [V] Rated Grid Frequency [Hz]				220 / 230 / 240 (180 ~ 270) 50 / 60, ±5		
EPS OUTPUT (WITH BATTERY)				00 / 00,=0		
Max. EPS Power [VA]	7000		8000	9000	10000	10500
EPS Rated Voltage [V], Frequency [Hz]				220/230/240, 50 / 60		
Max. EPS Current [A] EPS Peak Power [W]	31.8	10000 00-	36.4	40.9	45.5	47.7
Switch Time [ms]		10000, 60s		<20	12000, 60s	
Total Harmonic Distortion (THDv, Linear Load) [%]				<2		
Parallel Operation				Yes @max10PCS		
EFFICIENCY MPPT Efficiency [%]				00.00		
Euro-efficiency [%]				99.90 97.40		
Max. Efficiency [%]				97.80		
Max. Battery Charge Efficiency (PV to BAT) (@Full Load) [%]				98.50		
Max. Battery Charge / Discharge Efficiency (BAT to AC) (@Fu	ıll Load) [%]			97.00		
PV Reverse Polarity Protection				VE2		
Battert Reverse Protection				YES YES		
Anti-islanding Protection				YES		
Output Short Protection				YES		
Leakage Current Protection Insulation Resistor Detection				YES		
Over-current Protection / Over-temperature Protection				YES YES		
Over Voltage Category				III (AC side), II (DC side)		
AC/DC Surge Protection				Type II / Type II		
AFCI Protection POWER CONSUMPTION				Optional		
Standby Consumption [W] (Ldle)				<15		
STANDARD				-10		
Safety				IEC62109-1 / IEC62109-2 / IEC 62477-1		
EMC				EN 61000-6-1 / EN 61000-6-2 / EN 61000-6-3		
Cetification				G99 / NRS 097-2-1 and so on		
ENVIRONMENT LIMIT Ingress Protection				IP65		
Protective Class				Class I		
Operating Temperature Range [°C]				-25 +60 (Derating at +45)		
Humidity [%]				0 ~ 95 (Non-condensing)		
Altitude [m] Storage Temperature [°C]				<2000 -40 +70		
Noise Emission (Typical) [dB]				-40 +70 <30		
DIMENSION AND WEIGHT						
Dimensions (W * H * D) [mm]				450*527*208		
Weight [kg]				29 (KH) / 27.5 (KA) Natural		
Cooling Concept Topology				Natural Non-isolated		
, 67			Meter	(Optinal), WIFI, 4G (Optional), DRM, USB, CT, F	28485	
Communication			IVICTO	(Optinal), Will, 40 (Optional), Ditivi, 666, 01, 1	.0.00	

^{*} More technical characteristics are avaliable on demand and customized.

 $^{^{\}mbox{\tiny [1]}}$ The maxium generating power of each pv string is limited to 3300 watts.