

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.



BATTERY EXPANSION EASY UPGRADE







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.! KA10.!
ELECTRICAL CHARACTERISTICS						
Battery Type				Li-lon		
Battery Voltage Range [V]				85 ~ 480		
Recommended Battery Voltage [V]				300VDC		
Max. Charge Current [A]				50		
Max. Discharge Current [A]				50		
Communication Interfaces				CAN / RS485		
Reverse Connect Protection				YES		
NPUT PV (FOR KH ONLY)						
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]		16 / 16 / 16[1]			16 / 16 / 16 / 16[1]	
Max. Short Circuit Current (Input A / Input B) [A]		20 / 20 / 20			20 / 20 / 20 / 20	
Max. Inverter Backfeed Current to the Array [mA]				0		
MPPT Voltage Range [V]				80 ~ 500		
Start-up Voltage [V]				75		
No. of MPP Trackers		3			4	
Strings Per MPP Tracker				1		
DC Disconnection Switch				Optional		
DUTPUT AC				'		
Norminal AC Power [VA]	7000		8000	9000	10000	10500
Max. Apparent AC power [VA]	7700		8800	9900	10500	10500
Rated Grid Voltage (AC Voltage Range) [V]				220 / 230 / 240 (180 ~ 270)		
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				0.8 Leading to 0.8 Lagging		
Fotal Harmonic Distortion (THDi, Rated Power) [%]				<3		
NPUT 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]				220 / 230 / 240 (180 ~ 270)		
Rated Grid Frequency [Hz]				50 / 60, ±5		
PS OUTPUT (WITH BATTERY)						
Max. EPS Power [VA]	7000		8000	9000	10000	10500
PS Rated Voltage [V], Frequency [Hz]	, 000		0000	220/230/240, 50 / 60	10000	10000
Max. EPS Current [A]	31.8		36.4	40.9	45.5	47.7
PS Peak Power [W]		10000, 60s			12000, 60s	
Switch Time [ms]		10000,000		<20	12000, 000	
Fotal Harmonic Distortion (THDv, Linear Load) [%]				<2		
Parallel Operation				Yes @max10PCS		
FFICIENCY						
MPPT Efficiency [%]				99.90		
Euro-efficiency [%]				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) (@Ful	Load) [%]			97.00		
PROTECTION				57.00		
PV Reverse Polarity Protection				YES		
Battert Reverse Protection				YES		
Anti-islanding Protection				YES		
Output Short Protection				YES		
eakage Current Protection				YES		
nsulation Resistor Detection				YES		
Over-current Protection / Over-temperature Protection				YES		
Over Voltage Category				III (AC side), II (DC side)		
C/DC Surge Protection				Type II / Type II		
FCI Protection				Optional		
POWER CONSUMPTION						
tandby Consumption [W] (Ldle)				<15		
STANDARD						
Safety				IEC62109-1 / IEC62109-2 / IEC 62477-1		
MC			E	N 61000-6-1 / EN 61000-6-2 / EN 61000-6	-3	
Cetification			G99 /AS47	777.2 EN50549-1 CEI 0-21 NRS 097-2-	-1 and so on	
NVIRONMENT LIMIT						
ngress Protection				IP65		
rotective Class				Class I		
Operating Temperature Range [°C]				-25 +60 (Derating at +45)		
lumidity [%]				0 ~ 95 (Non-condensing)		
ultitude [m]				<2000		
torage Temperature [°C]				-40 +70		
Noise Emission (Typical) [dB]				<30		
DIMENSION AND WEIGHT						
Dimensions (W * H * D) [mm]				450*527*208		
Veight [kg]				29 (KH) / 27.5 (KA)		
Cooling Concept				Natural		
opology				Non-isolated		
			Meter(Optinal), WIFI, 4G (Optional), DRM, USB, C	T, RS485	
Communication						
Communication LCD Display				Backlight 16*4 Character		

 $^{^{\}ast}$ More technical characteristics are avaliable on demand and customized. $^{||}$ The maxium generating power of each pv string is limited to 3300 watts.