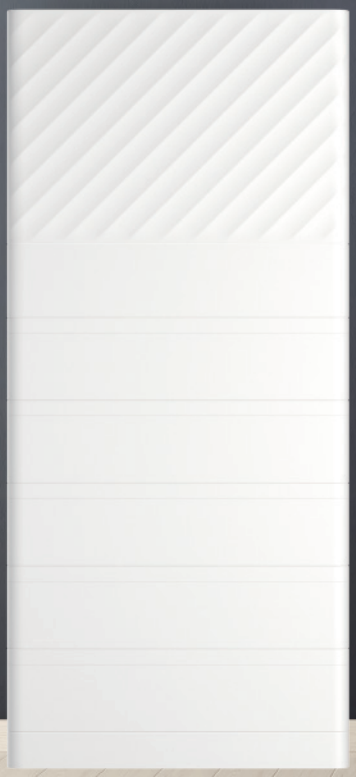
FOX ESS

DATASHEET

Split-Phase Hybrid

AIO-H1&AC1-3.8-US / 5.7 / 7.6 / 9.6 / 11.4

AIO US Series



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.

HIGH VOLTAGE

Compatible with high-voltage batteries for maximum round-trip efficiency.

TYPE 4X

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

REMOTE MONITORING

Monitor your system remotely via smartphone app or web portal.

REFINED - POWERFUL - FLEXIBLE

BATTERY EXPANSION

EASY UPGRADE

Expand your system easily by simply adding additional batteries. There are six battery size options, and seven batteries can be installed in series, providing up to 27.8 kWh of storage capacity.

For more about the Fox ESS range, visit:

us.fox-ess.com

TECHNICAL SPECIFICATIONS

AC Inverter Model: Hybrid Inverter Model:	AIO-AC1-3.8-US AIO-H1-3.8-US	AIO-AC1-5.7-US AIO-H1-5.7-US	AIO-AC1-7.6-US AIO-H1-7.6-US	AIO-AC1-9.6-US AIO-H1-9.6-US	AIO-AC1-11.4-US AIO-H1-11.4-US
PV INPUT (ONLY FOR HYBRID)					
Max. Solar STC Power [W]	7600	11400	15200	19200	22800
Max. Input Voltage [V]	600				
Start-up Input Voltage [V]	100				
Rated Input Voltage [V]	380				
MPPT Operating Voltage Range [V]	80 ~ 550				
MPPT Operating Voltage Range [V] (Full Load)	204 ~ 500	204 ~ 500	271 ~ 500	257 ~ 500	305 ~ 500
Max. Input Current [A]	28 / 14			28 / 14 / 14	
Max. Short-circuit Current [A]	44 / 22			44 / 22 / 22	
No. of Independent MPP Trackers	2			3	
No. of Strings per MPP Tracker	2 / 1			2 / 1 / 1	
BATTERY CONNECTION					
Battery Type	Lithium Battery (LFP)				
Battery Voltage Range [V]	85 ~ 460				
Rated Battery Voltage [V]	360				
Max. Continuous Charge / Discharge Current [A]	50				
Max. Continuous Charge / Discharge Power [W] (for H1)	5700/4180	8550/6270	11400/8360	14400/10560	17100/12540
(for AC1)	3800/4180	5700/6270	7600/8360	9600/10560	11400/12540
Max. Discharge Current (60s) [A]	60				
AC INPUT AND OUTPUT (GRID)					
Max. AC Input Power [VA]	3800	5700	7600	9600	11400
Max. AC Input Current [A]	16	24	32	40	48
Input Voltage Range [V]	211 ~ 264				
Input Frequency Range [Hz]	57 ~ 63				
Rated Output Power [W]	3800	5700	7600	9600	11400
Max. Output Apparent Power [VA]	3800	5700	7600	9600	11400
Rated Output Current [A]	15.8	23.8	31.7	40.0	47.5
Max. Output Current [A]	15.8	23.8	31.7	40.0	47.5
Rated Grid Voltage [V]	240 (211 ~ 264)				
Rated Grid Frequency [Hz]	57 ~ 63				
Power Factor	>0.99 (Adjustable from 0.8 leading to 0.8 lagging)				
THDi [%]	<3 @rated power				
AC OUTPUT (BACKUP)					
Rated Output Power [W]	3800	5700	7600	9600	11400
Rated output power @different batteries [W]	3800 @H2 Battery 3800 @H3 Battery 3800 @H4 Battery 3800 @H5 Battery 3800 @H6 Battery 3800 @H7 Battery	5700 @H2 Battery 5700 @H3 Battery 5700 @H4 Battery 5700 @H5 Battery 5700 @H6 Battery 5700 @H7 Battery	5760 @H2 Battery 7600 @H3 Battery 7600 @H4 Battery 7600 @H5 Battery 7600 @H6 Battery 7600 @H7 Battery	5760 @H2 Battery 8640 @H3 Battery 9600 @H4 Battery 9600 @H5 Battery 9600 @H6 Battery 9600 @H7 Battery	5760 @H2 Battery 8640 @H3 Battery 11400 @H4 Battery 11400 @H5 Battery 11400 @H6 Battery 11400 @H7 Battery
Max. Output Apparent Power [VA]	4180	6270	8360	10560	12540
Peak Output Apparent Power (10min) [VA]	4560	6840	9120	11520	13680
Peak Output Apparent Power (60s) [VA]	5130	7695	10260	12960	15390
Max. Continuous Output Current [A]	17.4	26.1	34.8	44.0	52.3
LRA [A]	110				
Rated Output Voltage [V]	120 / 240				
Rated Output Frequency [Hz]	60				
Load Start Capacity [A] LRA	48 @H2 Battery 72 @H3 Battery 96 @H4 Battery 110 @H5 Battery 110 @H6 Battery 110 @H7 Battery	48 @H2 Battery 72 @H3 Battery 96 @H4 Battery 110 @H5 Battery 110 @H6 Battery 110 @H7 Battery	48 @H2 Battery 72 @H3 Battery 96 @H4 Battery 110 @H5 Battery 110 @H6 Battery 110 @H7 Battery	48 @H2 Battery 72 @H3 Battery 96 @H4 Battery 110 @H5 Battery 110 @H6 Battery 110 @H7 Battery	48 @H2 Battery 72 @H3 Battery 96 @H4 Battery 110 @H5 Battery 110 @H6 Battery 110 @H7 Battery
THDv (Linear Load) [%]	<3 @rated power				
Imbalance for Split-Phase Loads [%]	100				
EFFICIENCY					
CEC Efficiency [%]	97.00				
Max. Efficiency [%]	97.60				
Max. Battery Discharge Efficiency (BAT to AC) (@full load, 340Vdc) [%]	97.40				
PROTECTION					
Insulation Monitoring	YES				
Residual Current Monitoring	YES				
DC Reverse Polarity Protection	YES				
Anti-islanding Protection	YES				
AC Short-circuit Protection	YES				
AC Overcurrent / Overvoltage Protection	YES				
DC Switch	YES				
SPD	DC: Type II / AC: Type II				
AFCI	YES				
GENERAL DATA					
Dimensions (H*W*D) [inch]	22.4*20.2*15.0 (570*512*380mm)				
Weight [lbs]	112.4 (51kg)				
Topology	Transformerless				
Cooling Method	Natural convection				
Noise Emission [dB]	<35				
Max. Operating Altitude [ft]	9843 (3000 m), derating above 6560 (2000 m)				
Operating Temperature Range [°F]	-13 ~ +140 (-25°C ~ +60°C), derating above 104 (40°C)				
Humidity [%]	0 ~ 100 (No Condensation)				
Protection Degree	Type 4X				
Standby consumption [W]	<25				
Monitoring Module	WiFi, LAN				
Communication	CAN2.0, RS485, Meter, CT, ISO alarm, SUNSPEC				
Display	LED, App, Website				
Warranty [Year]	12.5				
STANDARD COMPLIANCE (MORE AVAILABLE UPON REQUEST)					
Safety	UL1741 SA, UL 1741 SB, UL1741 CRD, HECO SRD-V2.0, CSA C22.2 No.107.1-16, UL1998, UL1699B, Rule 21				
EMC	FCC part15 CLASS B				
Grid Regulation	IEEE1547-2018, IEEE1547a-2020, IEEE1547.1-2020				