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

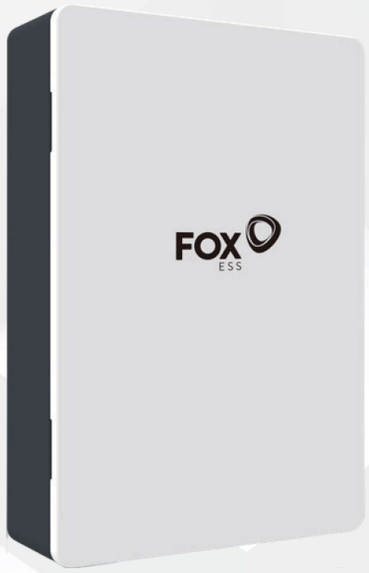
TECHNICAL SPECIFICATIONS

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		

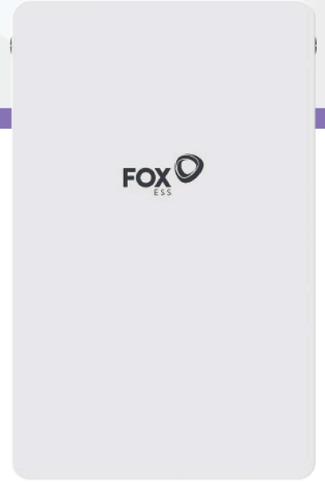
DATASHEET

FOX HUB G2

SMART ENERGY MANAGEMENT SYSTEM



- Automatic Off-Grid Protection
- Seamless On/Off Grid Transition
- Inverter Scalability
- Smart Load Shedding Circuit
- Generator Compatibility



As a smart energy management system, FOX Hub G2 completes the most critical piece of the puzzle in Fox ESS residential energy storage system. By integrating several intelligent features, FOX Hub G2 centralizes power from multiple sources and performs energy redistribution via FoxCloud US App to provide a more comprehensive power solution. It reassures energy flow safety under different circumstances, and relieves homeowners from power loss concern.

For more information about the Fox ESS range, visit:
us.fox-ess.com

TECHNICAL SPECIFICATIONS

MODEL	FOX HUB G2
GENERAL ELECTRICAL	
AC Current (Nominal) [A]	200
AC Input Voltage (Nominal) [Vac]	240
AC Output Voltage (Nominal) [Vac]	120/240
Rated AC Power [kW]	48
AC Voltage Range [Vac]	211 ~ 264
AC Frequency (Nominal) [Hz]	60
AC Frequency Range [Hz]	57 ~ 63
Microgrid Interconnection Device Rated Current [A]	200
Short-Circuit Breaking Capacity [kA]	22
Grid Disconnection Switchover Time [ms]	<20
EXTERNAL CONNECTION	
Solar terminal [A]	80
FOX Inverter [A]	80
Smart Circuits 1 (240V) [A]	80
Smart Circuit 2, 3 (120V) [A]	80
Non-Backup Load [A]	200
Backup Load Terminal [A]	200
Busbar Rating [A]	280
GENERATOR (Optional)	
Maximum Rated AC Power [kW]	48
AC Voltage Range [Vac]	211 ~ 264
Maximum Continuous Input Current [Adc]	200
Dry Contact Switch Voltage Rating [Vac/Vdc]	250/30
Dry Contact Switch Current Rating [A]	0.5(250Vac) / 3(30Vdc)
2-wire Start Switch	Yes
ADDITIONAL FEATURES	
Maximum Number of Inverter	4
Communication	CAN, RS485
Energy Meter (for Import/Export) [%]	0.5 accuracy
STANDARD COMPLIANCE	
Safety	UL67, UL869A, UL916, UL1741, CSA22.2 NO.107
Emissions	FCC part 15 class B
INSTALLATION SPECIFICATIONS	
Dimensions (H*W*D) [inch/mm]	26.2*17.4*6.2 /665*443*156.6
Weight [lbs/kg]	37.4 / 17
Supported Inverters	FOX US Series
Grid Conduit Size / AWG Range	2.5"Conduits / 6AWG - 250kcmil
Generator Input Conduit Size / AWG Range	2.5"Conduits / 6AWG - 250kcmil
Communication Conduit Size / AWG Range	1"Conduits / 24AWG - 16AWG
Cooling	Natural convection
Noise [dB]	<35
Operating Temeprature Range [°F/°C]	–4 ~ +122 / –20 ~ +50
Protection Rating	Type 3R
Warranty [year]	12.5

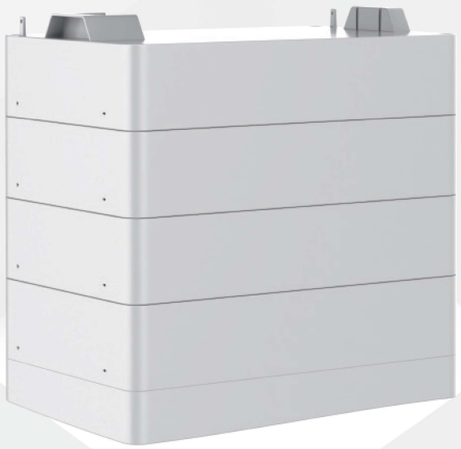
FOX ESS

DATASHEET

ONLY FOR AIO APPLICATION

AIO EQ4000

HIGH VOLTAGE STORAGE BATTERY



- 3.97kWh capacity
- Scalable to 27.80kWh
- 90% Depth of Discharge
- Large temperature tolerance
- CAN communication
- Voltage Range up to 459.9V

EASY INSTALLATION

HIGH EFFICIENCY

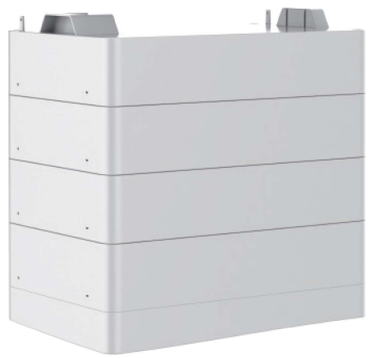
EXPANDABLE SYSTEM

90% DOD

The EQ is a high-performance, scalable battery storage system. The modular design allows for maximum flexibility, making it suitable for a broad range of storage applications.

Additional batteries can be installed in series, allowing for a maximum storage capacity of 27.80kWh. Installation is easy, with a plug and play solution that can save valuable time for installers.

For more information about the Fox ESS range, visit:
us.fox-ess.com



TECHNICAL SPECIFICATIONS

MODEL	EQ4000-AL2	EQ4000-AL3	EQ4000-AL4	EQ4000-AL5	EQ4000-AL6	EQ4000-AL7
ELECTRICAL CHARACTERISTICS						
Battery Type	LiFePO4 Prismatic Cell					
Battery Module	2*CS4000	3*CS4000	4*CS4000	5*CS4000	6*CS4000	7*CS4000
Nominal Capacity [kWh]	7.95	11.92	15.9	19.87	23.85	27.82
Nominal Voltage [V]	115.2	172.8	230.4	288	345.6	403.2
Operating Voltage [V]	97.2 ~ 131.4	145.8 ~ 197.1	194.4 ~ 262.8	243 ~ 328.5	291.6 ~ 394.2	340.2 ~ 459.9
Max. Charge / Discharge Current [A]	50					
Peak Discharge Current [A]	65 @60sec					
Round-trip Efficiency [%]	>95					
Depth of Discharge [%]	90					
Communication	CAN					
Scalability	Max. 7 Modules in Series					
OPERATING CONDITIONS						
Installation Location	Outdoor / Indoor (Stand)					
Operating Temperature [°C / °F]	-10 ~ 55 / 14 ~ 131					
Storage Temperature [°C / °F]	-20 ~ 55 / -4 ~ 131					
Cooling Method	Natural Convection					
Humidity [%]	0 ~ 100 (No Condensing)					
Altitude [m / ft]	Max. 2,000 / 6,560					
MECHANICAL CHARACTERISTICS						
Dimensions[W*H*D][mm]	570*330*380	570*420*380	570*540*380	570*660*380	570*780*380	570*900*380
Dimensions[W*H*D][inch]	22.4*13.0*15.0	22.4*16.5*15.0	22.4*21.3*15.0	22.4*26.0*15.0	22.4*30.7*15.0	22.4*35.4*15.0
Weight [kg/ lbs]	71.5 / 157.6	106.5 / 234.8	141.5 / 312	176.5 / 389.1	211.5 / 466.3	246.5 / 543.4
CERTIFICATES						
Safety	UL1973, UL9540, UL9540A					
Transportation	UN38.3					
Ingress Protection	IP65					
WARRANTY						
Standard Warranty [year]	Standard 12.5 years*[1]					

*[1] Refer to Fox ESS Battery Warranty Terms and Conditions.

Version 2.0 | 2024/11/22