FOX ESS

H1&AC1

HYBRID/AC 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. It is a new class of Inverter.
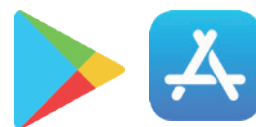
Fox ESS storage solutions are available with advanced and intuitive app based remote control and monitoring functionality.

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

High Voltage
Connects to high-voltage batteries for maximum round-trip efficiency.

IP65 Rated
Engineered to last with maximum flexibility. Suitable for outdoor installation.

Remote Monitoring
Monitor your system remotely via smartphone app or web portal.

up to **5kW** charge/discharge

REFINED – POWERFUL – FLEXIBLE

BATTERY EXPANSION
EASY UPGRADE

Expand your system easily by simply adding additional batteries. There are three battery size options, and Max. seven batteries can be installed in series, providing up to 18.20kWh of storage capacity.

For more about the Fox ESS range, visit:

WWW.FOX-ESS.COM

TECHNICAL SPECIFICATIONS

Model	H1-3.0-E AC1-3.0-E	H1-3.7-E AC1-3.7-E	H1-4.6-E1 AC1-4.6E1	H1-5.0-E1 AC1-5.0E1
INPUT PV (ONLY FOR HYBRID)				
Max. Input Power [W]	3900 A:2000 B:2000	4680 A:2400 B:2400	5980 A;3000 B:3000	6500 A:3300 B:3300
Max. Input Voltage [V]			600	
Start-up Input Voltage [V]			75	
Rated Input Voltage [V]			360	
MPPT Operating Voltage Range [V]			80 ~ 550	
Max. Input Current [A]			13.5/13.5	
Max. Short-circuit Current [A]			15/15	
No. of Independent MPP Trackers	2	2	2	2
No. of Strings per MPP Tracker	1	1	1	1
BATTERY CONNECTION				
Battery Type			Lithium-Ion	
Battery Voltage [V]			85 ~ 450	
Max. Charge/Discharge Current [A]			40	
Communication Interface		CAN(Communicate With Inverter), RS485 (Upgrade BMS)		
AC INPUT AND OUTPUT (GRID)				
Max. AC Input Power [VA]	7000	7680	9600	10000
Max. AC Input Current (per phase) [A]	31.8	34.9	43.7	45.5
Rated Output Power [W]	3000	3680	4600	5000
Max. Output Apparent Power [VA]	3300	4048	4600	5000
Rated Output Current (per phase) [A]	13.0	16.0	20.0	21.7
Max. Output Current [A]	14.4	17.6	22.0	23.9
Rated Grid Voltage [V]			220/230/240	
Rated Grid Frequency [Hz]			50/60	
Power Factor		1 default(Adjustable from 0.8 leading to 0.8 lagging)		
THDi [%]			<3 @rated power	
EPS OUTPUT (WITH BATTERY)				
Max. Output Apparent Power [VA]	5000	5000	6000	6000
Peak Output Apparent Power (60s) [VA]	6000	6000	7200	7200
Max. Current (per phase) [A]	21.7	21.7	26.1	26.1
Rated Output Voltage [V]			220/230/240	
Rated Output Frequency [Hz]			50/60	
Power Factor		1 (Adjustable from 0.8 leading to 0.8 lagging)		
THDv (linear Load) [%]			<2 @rated power	
Switch time [ms]			<20	
EFFICIENCY				
Euro Efficiency [%]			97.00	
Max. Efficiency [%]			97.80	
Max. Battery Charge Efficiency (PV to BAT) (@full load) [%]			98.50	
Max. Battery Discharge Efficiency (BAT to AC) (@full load) [%]			97.00	
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 III		
GENERAL DATA				
Dimensions (W*H*D) [mm]			430*410*178	
Weight [kg]			23	
Installation			Wall-Mounted	
Topology			Transformerless	
Cooling Method			Natural	
Noise Emission [dB]			35	
Max. Operating Altitude [m]			2000	
Operating Temperature Range [°C]			-25 ~ 60	
Humidity (No Condensation) [%]			0 ~100	
Ingress Protection			IP65	
Standby consumption [W]			<10	
Monitoring Module		WiFi, 4G, GPRS (Optional)		
Communication		2*RS485, DRM, Ripple Control, USB		
Display		LCD, App, Website		
STANDARD COMPLIANCE (MORE AVAILABLE UPON REQUEST)				
Safety		EN 62109-1, EN 62109-2		
EMC		EN 61000-6-2, EN 61000-6-3		
Grid Regulation		EN50549-1, C10 / 11, VDE-AR-N 4105, G98, G99, CEI 0-21, NRS 097-2-1, AS / NZS 4777.2		

* More technical characteristics are avaliable on demand and customized.