FOX ESS

DATASHEET

Single-Phase Hybrid/AC Inverter

H1-3.0-E / 3.7 / 4.6 / 5.0 / 6.0

AC1-3.0-E / 3.7 / 4.6 / 5.0 / 6.0

FOX

HYBRID/AC **INVERTER**

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

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

FOX 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.

REFINED - POWERFUL - FLEXIBLE

BATTERY EXPANSION

EASY UPGRADE

Expand your system easily by simply adding additional batteries. There are six battery size options, and Max. seven batteries can be installed in series, providing up to 18.2kWh of storage capacity.

For more about the FOX 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-E AC1-4.6-E	H1-5.0-E AC1-5.0-E	H1-6.0-E AC1-6.0-E
INPUT PV (ONLY FOR HYBRID)					
Max. Input Power [W]	3900	4680	5980	6500	7800
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	2
No. of Strings per MPP Tracker	1	1	1	1	1
BATTERY CONNECTION					
Battery Type			Lithium Battery (LFP)		
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	12000
Max. AC Input Current (per phase) [A]	31.8	34.9	43.6	45.5	54.5
Rated Output Power [W]	3000	3680	4600	5000	6000
Max. Output Apparent Power [VA]	3300	4048	5060	5500	6600
Rated Output Current (per phase) [A]	13.0	16.0	20.0	21.7	26.1
Max. Output Current [A]	14.3	17.6	22.0	23.9	28.7
Rated Grid Voltage [V]			220/230/240		
Rated Grid Frequency [Hz]			50/60		
Power Factor			1 (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	6000
Peak Output Apparent Power (60s) [VA]	6000	6000	7200	7200	7200
Max. Current (per phase) [A]	21.7	21.7	26.1	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%	97.00%	97.00%	97.00%	97.00%
Max. Efficiency	97.80%	97.80%	97.80%	97.80%	97.80%
Max. Battery Charge Efficiency (PV to BAT) (@full load)	98.50%	98.50%	98.50%	98.50%	98.50%
Max. Battery Discharge Efficiency (BAT to AC) (@full load)	97.00%	97.00%	97.00%	97.00%	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					
Demensions (WxHxD) [mm]			430*410*178		
Weight [kg]			23		
Installation			Wall-Mounted		
Topology			Transformerless		
Cooling Method			Nautral		
Noise Emission [dB]			35		
Max. Operating Altitude [m]			2000		
Operating Temperature Range [°C]			-25 to 60		
Humidity (No Condensation)			0% to 100%		
Protection Degree			IP65		
Standby consumption[W]			＜10		
Monitoring Module			WiFi, LAN, 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.