



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



# 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

Includes 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 three battery size options, and Max. 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



# 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
<b>INPUT PV (ONLY FOR HYBRID)</b>					
Max. Input Power [W]	3900 A:2000 B:2000	4680 A:2400 B:2400	5980 A:3000 B:3000	6500 A:3300 B:3300	7800 A:3900 B:3900
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				
No. of Strings per MPP Tracker	1				
<b>BATTERY CONNECTION</b>					
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)				
<b>AC INPUT AND OUTPUT (GRID)</b>					
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				
<b>EPS OUTPUT (WITH BATTERY)</b>					
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				
<b>EFFICIENCY</b>					
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				
<b>PROTECTION</b>					
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				
<b>GENERAL DATA</b>					
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, LAN, 4G, GPRS (Optional)				
Communication	2*RS485, DRM, Ripple Control, USB				
Display	LCD, App, Website				
<b>STANDARD COMPLIANCE (MORE AVAILABLE UPON REQUEST)</b>					
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 available on demand and customized.