



DATASHEET  
 Three-Phase Hybrid/AC Inverter  
 H3-5.0-E / 6.0 / 8.0 / 10.0 / 12.0  
 AC3-5.0-E / 6.0 / 8.0 / 10.0

# H3&AC3

## 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.



up to  
**12kW**  
 charge/  
 discharge

REFINED – POWERFUL – FLEXIBLE

## BATTERY EXPANSION EASY UPGRADE



Easily expand your system by just add extra batteries. There are three battery series you can choose, which enables a storage capacity of up to 33.24 kWh. There are Max. 10 storage inverters can be connected in parallel to allow you enlarge the system scale base on different installation requirement.

For more about the Fox ESS range, visit:

[WWW.FOX-ESS.COM](http://WWW.FOX-ESS.COM)



# TECHNICAL SPECIFICATIONS

Model	H3-5.0-E AC3-5.0-E	H3-6.0-E AC3-6.0-E	H3-8.0-E AC3-8.0-E	H3-10.0-E AC3-10.0-E	H3-12.0-E
<b>INPUT PV (only for hybrid)</b>					
Max. Input Power [W]	A:4000 B:4000	A:4000 B:4000	A:8000 B:5000	A:8000 B:5000	A:8000 B:5000
Max. Input Voltage [V]			1000 [1]		
Start-up Input Voltage [V]			160		
Rated Input Voltage [V]			720		
MPPT Operating Voltage Range [V]			160 ~ 950		
Max. Input Current [A]	14/14	14/14	26/14	26/14	26/14
Max. Short-circuit Current [A]	16/16	16/16	32/16	32/16	32/16
No. of Independent MPP Trackers			2		
No. of Strings per MPP Tracker	1/1	1/1	2/1	2/1	2/1
<b>BATTERY CONNECTION</b>					
Battery Type	Lithium Battery (LFP)				
Battery Voltage Range [V]	180 ~ 600 [2]				
Max. Charge/Discharge Current [A]	26.0				
Communication Interface	CAN(Communicate with inverter), RS485 (Upgrade BMS)				
<b>AC INPUT AND OUTPUT (GRID)</b>					
Max. AC Input Power [VA]	10000	12000	16000	16000	16000
Max. AC Input Current (per phase) [A]	15.2	18.2	24.2	24.2	24.2
Rated Output Power [W]	5000	6000	8000	10000	12000
Max. Output Apparent Power [VA]	5500	6600	8800	11000	13200
Rated Output Current (per phase) [A]	7.2	8.7	11.6	14.5	17.4
Max. Output Current (per phase) [A]	8.3	10.0	13.3	16.7	20.0
Rated Grid Voltage [V]	3L/N/PE 380/220; 400/230; 415/240				
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</b>					
Max. Output Apparent Power [VA]	5000	6000	8000	10000	12000
Peak Output Apparent Power (60s) [VA]	10000	12000	14000	15000	15000
Max. Current (per phase) [A]	7.2	8.7	11.6	14.5	17.4
Rated Output Voltage [V]	3L/N/PE 400/230				
Rated Output Frequency [Hz]	50/60				
Power Factor	1 ( Adjustable from 0.8 leading to 0.8 lagging )				
THDv ( linear Load) [%]	<3 @Rated Power				
Switch time [ms]	<20				
<b>EFFICIENCY</b>					
Euro Efficiency [%]	97.20	97.20	97.30	97.30	97.30
Max. Efficiency [%]	97.80	97.80	98.00	98.00	98.00
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 II				
AFCI	Optional				
<b>GENERAL DATA</b>					
Dimensions (W*H*D) [mm]	449*519*198				
Weight [kg]	28				
Installation	Wall-Mounted				
Topology	Transformerless				
Cooling Method	Natural		FAN Cooling		
Noise Emission [db]	35		45		
Max. Operating Altitude [m]	2000				
Operating Temperature Range [°C]	-25 ~ 60				
Humidity ( No Condensation ) [%]	0 ~ 100				
Ingress protection	IP65				
Standby Consumption [W]	<15				
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, EN 62477-1				
EMC	IEC 61000-6-1, IEC 61000-6-3				
Grid Regulation	EN50549-1, C10/11, VDE-AR-N 4105, G98, CEI 0-21				

\* More technical characteristics are available on demand and customized.

[1] For 1000V system, PV maximum operating voltage is 950V.

[2] Minimum operation battery voltage is 150V.