FOX ESS

DATASHEET

H3/AC3

THREE-PHASE **HYBRID/AC INVERTER**



HIGH VOLTAGE

Includes high-voltage batteries for maximum round-trip effciency.

EASY INSTALLATION

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

IP65 RATED

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

REMOTE MONITORING

Monitor your system remotely via smartphone app or web portal.



Advanced System Monitoring
with FoxCloud **V2.0**

REFINED - POWERFUL - FLEXIBLE

up to **12kW** charge/ discharge



Harness the power of the sun day and night with the ground-breaking range of Hybrid & AC inverter from Fox ESS. Full of advanced features and compatible with our very own range of high-voltage batteries, the hybrid range from Fox ESS.

H3	**5kW**	**12kW**
AC3	**5kW**	**10kW**

For more information about the Fox ESS range, visit:
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
INPUT PV (ONLY FOR HYBRID)					
Max. Array Power [Wp]	10000	12000	16000	20000	24000
Max. Input Power [W]	A:6500 B:4000	A:6500 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
BATTERY CONNECTION					
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)		
AC INPUT AND OUTPUT (GRID)					
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]	8.0	9.6	12.8	16.0	19.2
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		
EPS OUTPUT					
Max. Output Apparent Power [VA]	5000	6000	8000	10000	12000
Peak Output Apparent Power (60s) [VA]	10000	12000	14000	15000	15000
Max. Output Current (per phase) [A]	15.2	18.2	21.2	22.7	22.7
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		
EFFICIENCY					
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		
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			Optional		
GENERAL DATA					
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		
STANDARD COMPLIANCE (MORE AVAILABLE UPON REQUEST)					
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 avaliable on demand and customized.

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

[2] Min. operation battery voltage is 150V.