FOX ESS

DATASHEET
Single-Phase Hybrid/AC Inverter

H1-3.0 / 3.7 / 4.6 / 5.0 / 6.0-E-G2
AC1-3.0 / 3.7 / 4.6 / 5.0 / 6.0-E-G2
H1-4.6 / 5.0-E1-G2
AC1-4.6 / 5.0-E1-G2

H1(G2)&AC1(G2)
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 effciency.

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 **6kW** 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 33.24kWh of storage capacity.

For more about the FOX range, visit:

WWW.FOX-ESS.COM

TECHNICAL SPECIFICATIONS

Model	H1-3.0-E-G2 AC1-3.0-E-G2	H1-3.7-E-G2 AC1-3.7-E-G2	H1-4.6-E-G2 AC1-4.6-E-G2	H1-5.0-E-G2 AC1-5.0-E-G2	H1-6.0-E-G2 AC1-6.0-E-G2	H1-4.6-E1-G2 AC1-4.6-E1-G2	H1-5.0-E1-G2 AC1-5.0-E1-G2
INPUT PV (ONLY FOR HYBRID)							
Max. PV Array Power [Wp]	6000	7400	9200	10000	12000	9200	10000
Max. Input Power [W]	4500 A:2250 B:2250	5500 A:2750 B:2750	6900 A:3450 B:3450	7500 A:3750 B:3750	9000 A:4500 B:4500	6900 A:3450 B:3450	7500 A:3750 B:3750
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]				16 / 16			
Max. Short-circuit Current [A]				20 / 20			
No. of Independent MPP Trackers				2			
No. of Strings per MPP Tracker				1			
BATTERY CONNECTION							
Battery Type				Lithium Battery (LFP)			
Battery Voltage [V]				80 ~ 480			
Max. Charge/Discharge Current [A]				40			
Communication Interface				CAN(communicate with inverter, upgrade BMS)			
AC INPUT AND OUTPUT (GRID)							
Max. AC Input Power [VA]	6000	7680	9200	10000	12000	9200	10000
Max. AC Input Current (per phase) [A]	27.3	34.9	41.8	45.5	54.5	41.8	45.5
Rated Output Power [W]	3000	3680	4600	5000	6000	4600	5000
Rated Apparent Power [VA]	3000	3680	4600	5000	6000	4600[2]	5000[3]
Max. Output Apparent Power [VA]	3300	4048/3680[1]	5060	5500	6600	4600	5000
Rated Output Current (per phase) [A](For AUS)	13.0	16.0	20.0	21.7	26.1	20.0	21.7
Max. Output Current [A]	15.0	18.4	23.0	25.0	30.0	20.9	22.7
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]	3000	3680	4600	5000	6000	4600	5000
Rated Output Power [W]	3000	3680	4600	5000	6000	4600	5000
Peak Output Apparent Power (60s) [VA]	3600	4400	5500	6000	7200	5500	6000
Max. Current (per phase) [A]	13.6	16.7	20.9	22.7	27.3	20.9	22.7
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			
Parallel operation [PCS]				10			
Switch time [ms]				<20			
EFFICIENCY							
Euro Efficiency [%]	95.26	95.70	96.23	96.30	96.33	96.23	96.30
Max. Efficiency [%]	97.01	97.08	97.04	97.08	97.08	97.04	97.08
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				Active Frequency Drift with Positive Feedback			
AC Short-circuit Protection				YES			
AC Overcurrent/Overvoltage Protection				YES			
DC Switch				YES			
Battery Wack-up Function				YES			
Over Voltage category				III(AC), II(DC)			
AFCI				Optional			
GENERAL DATA							
Dimensions (WxHxD) [mm]				434*418*185			
Weight [kg]				22			
Installation				Wall-Mounted			
Topology				Non-isolated			
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]				<15			
Monitoring Module				WiFi, LAN(optional) , 4G(optional)			
Communication				RS485, DRM, Ripple Control, USB, CAN			
Display				LCD, App, Website			
Country Of Manufacture				China			
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.

1、3680 for G98.   2、4600 for German and Belgium.   3、5000 for Belgium.

V1.3 | 2024/05/20