FOX ESS

DATASHEET

EVO 10

ENERGY STORAGE SYSTEM



FULLY INTEGRATED STORAGE SYSTEM

Seamlessly integrated, truly all-in-one solution.

LESS IS MORE

Sleek, minimalist design for effortless one-step installation.

DOUBLE OFF-GRID BACKUP CAPABILITY

The system experienced a 200% overload for 10 seconds.

4MS

Support 4ms parallel off-grid switching.



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

IP66 RATED

EPS FUNCTION

-20°C ~ 55°C

95% DOD

EVO 10

A next-generation energy storage system solution with a fully-integrated inverter/charger and boasting a range of advanced features.

5kW ···» **30kW**
10kWh ···» **30kWh**
Off-Grid

For more information about the Fox ESS range, visit:
www.fox-ess.com

TECHNICAL SPECIFICATIONS

MODEL		EVO 10-3.7-H	EVO 10-5-H	EVO 10-8-H	EVO 10-10-H
PV INPUT (ONLY FOR HYBRID)					
Max. PV Array Power [Wp]		16000	16000	20000	20000
Max. Input Power [W]		13700	15000	18000	20000
Max. MPPT Input Power [W]		8000/8000	8000/8000	8000/8000/8000	8000/8000/8000
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]		20/20	20/20	20/20/20	20/20/20
Max. Short-circuit Current [A]		25/25	25/25	25/25/25	25/25/25
No. of MPP Trackers		2	2	3	3
Strings per MPP Tracker			1		
BATTERY CONNECTION					
Battery Type			LFP ($LiFePO_4$)		
Battery Energy [kWh]			10.24		
Depth of Discharge [%]			95		
Max. battery charge power [W]			10000		
Cycle Life			6000		
AC INPUT AND OUTPUT (GRID)					
Output	Rated Power [W]	3680	5000	8000	10000
	Rated Apparent Power [VA]	3680	5000	8000	10000
	Max. Apparent Power [VA]	3680	5500	8800	11000
	Rated Output Current (Per Phase) [A]	16.7	22.7	36.4	45.5
	Max. AC Current (Per Phase) [A]	16.7	25.0	40.0	50.0
	THDi [%]		<3 @rated power		
Input	Max. Apparent Power [VA]	4400	6000	9600	12000
	Max. Input Current [A] (Per Phase)	20.0	27.3	43.6	54.5
Output & Input	Nominal Voltage [V]		220/230/240, L/N/PE		
	Nominal Frequency [Hz]		50/60, ±5		
	Power Factor		1(Adjustable from 0.8 leading to 0.8 lagging)		
	Inrush Current [A]		15 @0.5ms		
EPS OUTPUT					
Max. Apparent Power [VA]		3680	5000	8000	10000
Peak Apparent Power [VA]		4440@60s	6000@60s	9600@60s	12000@60s
		5550@30s	7500@30s	12000@30s	15000@30s
		7400@10s	10000@10s	16000@10s	20000@10s
Nominal Voltage [V]			220/230/240		
Nominal Frequency [Hz]			50/60		
Max. Output Current (Per Phase) [A]		16.7@220V	22.7@220V	36.4@220V	45.5@220V
Power Factor			1 (Adjustable)		
Switch Time [ms]			<4		
THDV [%]			<3@Linear Load		
Parallel Operation			Yes @max 3PCS		
EFFICIENCY					
Max. Conversion Efficiency [%]		97.60	97.62	97.62	97.62
European Efficiency [%]		97.16	97.20	97.20	97.20
Max. Battery Charge Efficiency (PV To BAT) @full Load [%]			97.33		
Max. Battery Charge/discharge Efficiency (BAT To AC) @full Load [%]			96.40		
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		
Overvoltage Category			DC: Type II /AC: Type II		
AFCI Protection			YES		
GENERAL DATA					
Dimensions (W*H*D) [mm]			584*1009*197		
Weight [kg]			113		
Installation			Floor-mounted/Wall-mounted		
Cooling Method			Intelligent air cooling		
Noise Emission [dB]			<45, Average		
Max. Operating Altitude [m]			<4000@Derating exceeding 2000m		
Operating Temperature Range [°C]			-20 ~ 55		
Humidity (No Condensation) [%]			0 ~ 100		
Ingress Protection			IP66		
Standby Consumption [W]			＜20		
Monitoring Module			WiFi, LAN		
Communication Interface			Ethernet, EMS(RS 485), Meter, WiLAN(WiFi+LAN+Bluetooth), DRM, Ripple Control, USB, BMS(CAN), SG Ready		
Display			LED, LCD, APP, Website		
Supports Dual EPS Expansion			YES		
STANDARD COMPLIANCE (MORE AVAILABLE UPON REQUEST)					
Safety			EN/IEC 62109-1, EN/IEC 62109-2, EN/IEC62477-1,EN/IEC 62040(AU)		
EMC			EN IEC 61000-6-1:2019, EN IEC 61000-6-3:2021, EN IEC 61000-6-2:2019, EN IEC 61000-6-4:2019, IEC 62920:2017		
RED			EN 50665:2017, ENIEC 62311:2020, EN 301 489-1 V2.2.3 (2019-11), EN 301 489-17 V3.2.4 (2020-09), EN 300 328 V2.2.2(2019-07), EN 55032:2015+A11:2020+A1:2020, EN 55035:2017+A11:2020		
Grid Regulation			G99, CEI 0-21, AS/NZS 4777.2:2020, NRS 097-2-1, IEC 61727, EN 50549-1, P140/P515		
Battery Regulation			IEC62619:2022		
Transportation			UN 38.3		
Environment			ROHS, REACH, WEEE		