



Stackable AIO

THREE-PHASE **HYBRID**



FLEXIBLE APPLICATION

- Built-in 63A bypass for full house backup.
- 3 MPPTs, 20A per string.
- PV min. voltage of 120V and min. battery voltage of 80V.



EASY INSTALLATION

- Integrated configuration, plug and play set-up.
- Designed for single-person installation.



SAFE AND DURABLE

- Integrating active and passive safety.
- Intelligent AFCI function.
- IP66 and type II DC/AC surge protection.



REMOTE MONITORING

- Monitor your system remotely via smartphone App or Web portal.
- Ready for AI and VPP Apps.



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



Stackable AIO is the latest generation of an integrated residential energy storage system, modular designed to meet various installation scenarios.

5kW ...>> 15kW



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

PQ3-M + EQ4800-S

Inverter Model	PQ3-5.0-M	PQ3-10.0-L-M	PQ3-15.0-M
Battery	EQ4800-S		
System Model	PQ3-5.0-M_EQ4800-S_2S	PQ3-10.0-L-M_EQ4800-S_2S	PQ3-15.0-M_EQ4800-S_2S
	PQ3-5.0-M_EQ4800-S_3S	PQ3-10.0-L-M_EQ4800-S_3S	PQ3-15.0-M_EQ4800-S_3S
	PQ3-5.0-M_EQ4800-S_4S	PQ3-10.0-L-M_EQ4800-S_4S	PQ3-15.0-M_EQ4800-S_4S
	PQ3-5.0-M_EQ4800-S_5S	PQ3-10.0-L-M_EQ4800-S_5S	PQ3-15.0-M_EQ4800-S_5S
	PQ3-5.0-M_EQ4800-S_6S	PQ3-10.0-L-M_EQ4800-S_6S	PQ3-15.0-M_EQ4800-S_6S
	PQ3-5.0-M_EQ4800-S_7S	PQ3-10.0-L-M_EQ4800-S_7S	PQ3-15.0-M_EQ4800-S_7S
	PQ3-5.0-M_EQ4800-S_8S	PQ3-10.0-L-M_EQ4800-S_8S	PQ3-15.0-M_EQ4800-S_8S
	PQ3-5.0-M_EQ4800-S_9S	PQ3-10.0-L-M_EQ4800-S_9S	PQ3-15.0-M_EQ4800-S_9S

PQ3-M+ EQ5500-S

Inverter Model	PQ3-5.0-M	PQ3-10.0-L-M	PQ3-15.0-M
Battery	EQ5500-S		
System Model	PQ3-5.0-M_EQ5500-S_2S	PQ3-10.0-L-M_EQ5500-S_2S	PQ3-15.0-M_EQ5500-S_2S
	PQ3-5.0-M_EQ5500-S_3S	PQ3-10.0-L-M_EQ5500-S_3S	PQ3-15.0-M_EQ5500-S_3S
	PQ3-5.0-M_EQ5500-S_4S	PQ3-10.0-L-M_EQ5500-S_4S	PQ3-15.0-M_EQ5500-S_4S
	PQ3-5.0-M_EQ5500-S_5S	PQ3-10.0-L-M_EQ5500-S_5S	PQ3-15.0-M_EQ5500-S_5S
	PQ3-5.0-M_EQ5500-S_6S	PQ3-10.0-L-M_EQ5500-S_6S	PQ3-15.0-M_EQ5500-S_6S
	PQ3-5.0-M_EQ5500-S_7S	PQ3-10.0-L-M_EQ5500-S_7S	PQ3-15.0-M_EQ5500-S_7S
	PQ3-5.0-M_EQ5500-S_8S	PQ3-10.0-L-M_EQ5500-S_8S	PQ3-15.0-M_EQ5500-S_8S
	PQ3-5.0-M_EQ5500-S_9S	PQ3-10.0-L-M_EQ5500-S_9S	PQ3-15.0-M_EQ5500-S_9S

TECHNICAL SPECIFICATIONS

INVERTER MODEL	PQ3-5.0-M	PQ3-10.0-L-M	PQ3-15.0-M
PV INPUT			
Max. Array Power[W]	11000	20000	30000
Max. Input Power [W]	11000	20000	30000
Max. Input Voltage [V]		1000 [1]	
Nominal Operating Voltage [V]		620	
Max. MPPT Input Current [A]		20/20/20	
Max. MPPT Short-Circuit Current [A]		25/25/25	
Max. MPPT Input Power [W]		10000/10000/10000	
Min. Operating Input Voltage [V]		90 [2]	
MPPT Voltage Range [V]		120 ~ 950	
Start-Up Input Voltage [V]		140	
MPPT Voltage Range (Full Load) [V]	120 ~ 850	175 ~ 850	263 ~ 850
No. of MPP Trackers		3	
Strings per MPP Tracker		1+1+1	
Max. Inverter Backfeed Current to the Array		0	
BATTERY CONNECTION			
Battery Type		Lithium-Ion battery (LFP)	
Battery Voltage [V]		80 ~ 500	
Min. Operating Battery Voltage [V]		85	
Min. Battery Voltage @ Full AC Load [V]	108	210	310
Max. Battery Charge Power [W]	6000	12000	15000
Max. Battery Discharge Power [W]	5000	10000	15000
Max. Charge/Discharge Current [A]		50	
Communication Interface		CAN	
AC OUTPUT			
Nominal Output Power [W]	5000	9999	15000
Max. Apparent Output Power [VA]	5500	9999	16500
Rated Grid Voltage (AC Voltage Range) [V]		400/230; 380/220, 3L/N/PE	
Rated Grid Frequency [Hz]		50/60, ±5	
Rated Output Current (Per Phase) [A]	7.6	15.2	22.7
Max. Output Current (Per Phase) [A]	8.3	15.2	25.0
Power Factor		1 (Adjustable from 0.8 leading to 0.8 lagging)	
THDI [%]		<3 @rated power	
AC INPUT			
Max. Input Power [VA]		43470	
Rated Grid Voltage [V]		400/230; 380/220, 3L/N/PE	
Rated Grid Frequency [Hz]		50/60, ±5	
Max. Input Current (Per Phase) [A]		63 [3]	
EPS OUTPUT(ON GRID MODE)			
Max. Output Power For Backup Load (Per Phase) [W]		43470	
Max. Output Current For Backup Load [A]		3*63	
EPS OUTPUT(OFF GRID MODE)			
Max. Apparent Output Power [VA]	5000	10000	15000
Peak Apparent Output Power (60s) [VA]	6000	12000	15000
Rated Output Voltage [V]		400/230; 3L/N/PE	
Rated Grid Frequency [Hz]		50/60	
Max. Continuous Current (Per Phase) [A]	7.2	14.5	21.7
Max. Unbalanced Load Power (Per Phase) [kW]	1.6	3.3	5.0
Step-Down Start		YES	
EPS Overload Automatic Recovery Time		Try 3 times(15s) everytime will alarm a fault, after 3 failures, stop the recovery logic, clients need to clear the fault manually.	
Power Factor		1 (Adjustable from 0.8 leading to 0.8 lagging)	
Parallel Operation		Yes @ Max. 10 pcs	
Switch Time (Single Device) [ms]		<20	
THDV [%]		<3 @rated power	
EFFICIENCY			
MPPT Efficiency [%]		99.90	
Max. Efficiency [%]	97.80	97.90	97.90
European Efficiency [%]	97.00	97.30	97.50
Max. Battery Charge Efficiency (PV to BAT) (@ Full Load) [%]	97.00	97.40	97.60
Max. Battery Discharge Efficiency (BAT to AC) (@ Full Load) [%]	97.00	97.20	97.20

TECHNICAL SPECIFICATIONS

INVERTER MODEL	PQ3-5.0-M	PQ3-10.0-L-M	PQ3-15.0-M
PROTECTION			
PV Reverse Polarity Protection		YES	
Battery Reverse Protection		YES	
Anti-Islanding Protection		YES	
Output Short Protection		YES	
Leakage Current Protection		YES	
Insulation Resistor Detection		YES	
Overvoltage Category		III (AC Side), II (DC Side)	
Reverse Connect Protection		YES	
Overcurrent Protection/Overtemperature Protection		YES	
DC/AC Surge Protection		Type II (PV)/Type II (AC)	
AFCI Protection		Optional	
DC Switch		YES	
GENERAL DATA			
Dimensions (W*H*D) [mm]		570*420*380 (Inverter)	
Dimensions of Packing (W*H*D) [mm]		760*545*595 (Inverter)	
Net Weight [kg]		42.6 (Inverter)	
Gross Weight [kg]		64.5 (Inverter)	
Installation		Floor-mounted	
Operating Temperature Range [°C]		-25 ~ +60 (Derating at 45)	
Storage Temperature [°C]		-40 ~ +70	
Storage/Operation Relative Humidity [%]		0 ~ 100 (No condensation)	
Altitude [m]		<4000 @ Derating Exceeding 3000	
Protection Class		I	
Ingress Protection		IP66 (For Outdoor Use)	
Standby Consumption [W]		<15 (Only PV and Battery)	
Idle Mode		YES	
Cooling	Natural	Natural	FAN Cooling
Noise Level [dB]	<40	<40	<55
Inverter Topology		Non-Isolated	
Monitoring Module (Integrated)		WIFI, LAN, 4G	
Communication Interface		Meter, WIFI/4G (Optional), Bluetooth, DRM, Ethernet, USB, BMS (CAN), RS485, Ripple Control, SG Ready, Dry Contact*2	
Display		LED, LCD, App, Website	
Button		Capacitive Touch Sensor	
Buzzer		1, Inside (EPS & Earth Fault)	
STANDARD			
Safety		EN/IEC62109-1, EN/IEC62109-2	
EMC		IEC 61000-6-1, IEC 61000-6-2, IEC 61000-6-3, IEC61000-4-2/3/4/5/6/8	
Certification		AS4777.2-2020, VDE-AR-N 4105, VDE0126-1-1, G98, EN50549-1, CEI 0-21, IEC62116, IEC61727, IEC61683	

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

[2] The starting working voltage of the power supply is 90V.

[3] Configuration can be set on the platform according to requirements.

TECHNICAL SPECIFICATIONS

BATTERY MODEL	EQ4800-S _2S	EQ4800-S _3S	EQ4800-S _4S	EQ4800-S _5S	EQ4800-S _6S	EQ4800-S _7S	EQ4800-S _8S	EQ4800-S _9S
ELECTRICAL CHARACTERISTICS								
Battery Type	LFP (LiFePO ₄)							
Battery Module (EQ4800-S)	2	3	4	5	6	7	8	9
Nominal Voltage [V]	89.6	134.4	179.2	224.0	268.8	313.6	358.4	403.2
Nominal Power [kW]	4.48	6.72	8.96	11.20	13.44	15.68	17.92	20.16
Nominal Energy [kWh]	9.32	13.98	18.64	23.30	27.96	32.61	37.27	41.93
Usable Capacity [kWh]	9.32	13.98	18.64	23.30	27.96	32.61	37.27	41.93
Operating Voltage[V]	81.2 ~ 102.2	121.8 ~ 153.3	162.4 ~ 204.4	203.0 ~ 255.5	243.6 ~ 306.6	284.2 ~ 357.7	324.8 ~ 408.8	365.4 ~ 459.9
Nominal Capacity [Ah]	104							
Recommend Charge/Discharge Current [A]	30							
Max. Charge/Discharge Current [A] ^{*1}	50							
Peak Discharge Current (60S) [A]	65							
Battery Pack Round-Trip Efficiency [%]	>95							
Depth Of Discharge [%]	100							
Communication	CAN							
Display	LED							
Scalability	Max. 9 Modules in Series							
OPERATING CONDITIONS								
Installation Location	Outdoor/ Indoor (Stand)							
Operating Temperature [°C]	Charge: 0 ~ 55, Discharge: -10 ~ 55							
Storage Temperature [°C]	-10 ~ 35							
Cooling Method	Natural Convection							
Humidity [%]	5 ~ 95 (No Condensation)							
Altitude [m]	Max. 3,000							
MECHANICAL CHARACTERISTICS								
Dimensions (W*D*H) [mm]	570*380							
	*386	*524	*662	*800	*938	*1076	*1214	*1352
Weight [kg]	83.5	122.5	161.5	200.5	239.5	278.5	317.5	356.5
CERTIFICATES								
Safety	IEC 62619							
EMC	EN IEC 61000-6-1/2/3/4							
Transportation	UN38.3							
Ingress Protection	IP65							
WARRANTY								
Standard Warranty [year] ^{*2}	10							
MANUFACTURE								
Country of Manufacture	China							

*1, The current is affected by temperature, cell voltage and SOC.

*2, Refer to Fox ESS Battery Warranty Terms and Conditions.

TECHNICAL SPECIFICATIONS

BATTERY MODEL	EQ5500-S _2S	EQ5500-S _3S	EQ5500-S _4S	EQ5500-S _5S	EQ5500-S _6S	EQ5500-S _7S	EQ5500-S _8S	EQ5500-S _9S
ELECTRICAL CHARACTERISTICS								
Battery Type	LFP (LiFePO ₄)							
Battery Module (EQ5500-S)	2	3	4	5	6	7	8	9
Nominal Voltage [V]	89.6	134.4	179.2	224.0	268.8	313.6	358.4	403.2
Nominal Power [kW]	4.48	6.72	8.96	11.20	13.44	15.68	17.92	20.16
Nominal Energy [kWh]	10.92	16.38	21.84	27.30	32.76	38.22	43.68	49.14
Usable Capacity [kWh]	10.92	16.38	21.84	27.30	32.76	38.22	43.68	49.14
Operating Voltage[V]	81.2 ~ 102.2	121.8 ~ 153.3	162.4 ~ 204.4	203.0 ~ 255.5	243.6 ~ 306.6	284.2 ~ 357.7	324.8 ~ 408.8	365.4 ~ 459.9
Nominal Capacity [Ah]	122							
Recommend Charge/Discharge Current [A]	50							
Max. Charge/Discharge Current [A] ^{*1}	50							
Peak Discharge Current (60S) [A]	65							
Battery Pack Round-Trip Efficiency [%]	>95							
Depth Of Discharge [%]	100							
Communication	CAN							
Display	LED							
Scalability	Max. 9 Modules in Series							
OPERATING CONDITIONS								
Installation Location	Outdoor/ Indoor (Stand)							
Operating Temperature [°C]	Charge: 0 ~ 55, Discharge: -10 ~ 55							
Storage Temperature [°C]	-10 ~ 35							
Cooling Method	Natural Convection							
Humidity [%]	5 ~ 95 (No Condensation)							
Altitude [m]	Max. 3,000							
MECHANICAL CHARACTERISTICS								
Dimensions (W*D*H) [mm]	570*380							
	*386	*524	*662	*800	*938	*1076	*1214	*1352
Weight [kg]	87.0	128.5	170.0	211.5	253.0	294.5	336.0	377.5
CERTIFICATES								
Safety	IEC 62619							
EMC	EN IEC 61000-6-1/2/3/4							
Transportation	UN38.3							
Ingress Protection	IP65							
WARRANTY								
Standard Warranty [year] ^{*2}	10							
MANUFACTURE								
Country of Manufacture	China							

*1, The current is affected by temperature, cell voltage and SOC.

*2, Refer to Fox ESS Battery Warranty Terms and Conditions.