



Stackable AIO

SINGLE-PHASE **HYBRID**



FLEXIBLE APPLICATION

- Built-in 63A bypass for full house backup.
- 4ms seamless switch.
- Up to 200% PV input with 4 MPPTs, 20A per string.



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 ...>> 12kW



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

PQ1 + EQ4800-S

Inverter Model	PQ1-5.0	PQ1-8.0	PQ1-10.0	PQ1-12.0
Battery	EQ4800-S			
System Model	PQ1-5.0_EQ4800-S_2S	PQ1-8.0_EQ4800-S_2S	PQ1-10.0_EQ4800-S_2S	PQ1-12.0_EQ4800-S_2S
	PQ1-5.0_EQ4800-S_3S	PQ1-8.0_EQ4800-S_3S	PQ1-10.0_EQ4800-S_3S	PQ1-12.0_EQ4800-S_3S
	PQ1-5.0_EQ4800-S_4S	PQ1-8.0_EQ4800-S_4S	PQ1-10.0_EQ4800-S_4S	PQ1-12.0_EQ4800-S_4S
	PQ1-5.0_EQ4800-S_5S	PQ1-8.0_EQ4800-S_5S	PQ1-10.0_EQ4800-S_5S	PQ1-12.0_EQ4800-S_5S
	PQ1-5.0_EQ4800-S_6S	PQ1-8.0_EQ4800-S_6S	PQ1-10.0_EQ4800-S_6S	PQ1-12.0_EQ4800-S_6S
	PQ1-5.0_EQ4800-S_7S	PQ1-8.0_EQ4800-S_7S	PQ1-10.0_EQ4800-S_7S	PQ1-12.0_EQ4800-S_7S
	PQ1-5.0_EQ4800-S_8S	PQ1-8.0_EQ4800-S_8S	PQ1-10.0_EQ4800-S_8S	PQ1-12.0_EQ4800-S_8S
	PQ1-5.0_EQ4800-S_9S	PQ1-8.0_EQ4800-S_9S	PQ1-10.0_EQ4800-S_9S	PQ1-12.0_EQ4800-S_9S

PQ1 + EQ5500-S

Inverter Model	PQ1-5.0	PQ1-8.0	PQ1-10.0	PQ1-12.0
Battery	EQ5500-S			
System Model	PQ1-5.0_EQ5500-S_2S	PQ1-8.0_EQ5500-S_2S	PQ1-10.0_EQ5500-S_2S	PQ1-12.0_EQ5500-S_2S
	PQ1-5.0_EQ5500-S_3S	PQ1-8.0_EQ5500-S_3S	PQ1-10.0_EQ5500-S_3S	PQ1-12.0_EQ5500-S_3S
	PQ1-5.0_EQ5500-S_4S	PQ1-8.0_EQ5500-S_4S	PQ1-10.0_EQ5500-S_4S	PQ1-12.0_EQ5500-S_4S
	PQ1-5.0_EQ5500-S_5S	PQ1-8.0_EQ5500-S_5S	PQ1-10.0_EQ5500-S_5S	PQ1-12.0_EQ5500-S_5S
	PQ1-5.0_EQ5500-S_6S	PQ1-8.0_EQ5500-S_6S	PQ1-10.0_EQ5500-S_6S	PQ1-12.0_EQ5500-S_6S
	PQ1-5.0_EQ5500-S_7S	PQ1-8.0_EQ5500-S_7S	PQ1-10.0_EQ5500-S_7S	PQ1-12.0_EQ5500-S_7S
	PQ1-5.0_EQ5500-S_8S	PQ1-8.0_EQ5500-S_8S	PQ1-10.0_EQ5500-S_8S	PQ1-12.0_EQ5500-S_8S
	PQ1-5.0_EQ5500-S_9S	PQ1-8.0_EQ5500-S_9S	PQ1-10.0_EQ5500-S_9S	PQ1-12.0_EQ5500-S_9S

TECHNICAL SPECIFICATIONS

INVERTER MODEL	PQ1-5.0	PQ1-8.0	PQ1-10.0	PQ1-12.0
PV INPUT				
Max. Array Power[W]	16000	24000	24000	24000
Max. Input Power [W]	15000	20000	22000	24000
Max. MPPT Input Power (Per) [W]			8000	
Max. Input Voltage [V]			600 [1]	
Min. Input Voltage [V]			75	
Start-Up Input Voltage [v]			80	
Nominal Voltage [V]			360	
MPPT Voltage Range [V]			80 ~ 550	
MPPT Voltage Range (Full Load) [V]	130 ~ 550	105 ~ 550	130 ~ 550	155 ~ 550
Max. PV Input Current [A]	20/20	20/20/20/20	20/20/20/20	20/20/20/20
Max. Isc PV Current [A]	25/25	25/25/25/25	25/25/25/25	25/25/25/25
No. of MPP Trackers	2	4	4	4
Strings per MPP Tracker	1+1	1+1+1+1	1+1+1+1	1+1+1+1
BATTERY CONNECTION				
Battery Type		Lithium-Ion battery (LFP)		
Battery Voltage [V]			80 ~ 500	
Min. Operating Battery Voltage [V]			80	
Min. Battery Voltage @ Full AC Load [V]	105	165	207	247
Max. Battery Charge Power [W]			12000	
Max. Battery Discharge Power [W]	5000	8000	10000	12000
Max. Charge/Discharge Current [A]			50/50	
Depth of Discharge [%]			100	
Scalability			YES	
AC OUTPUT				
Rated Output Power [W]	5000	8000	10000	12000
Rated Apparent Power [VA]	5000	8000	10000 [2]	12000
Max. Apparent Power [VA]	5500	8800	11000 [2]	13200
Rated Grid Voltage [V]			220/230/240, L/N/PE	
Rated Grid Frequency [Hz]			50/60, ±5	
Rated Output Current [A]	22.7	36.4	45.5	54.5
Max. Output Current [A]	25.0	40.0	50.0	60.0
Power Factor		1 (Adjustable from 0.8 leading to 0.8 lagging)		
THDI [%]			<3 @rated power	
AC INPUT				
Max. Apparent Power [VA]	8800	14500 [3]	14500 [3]	14500 [3]
Rated Grid Voltage [V]			220/230/240, L/N/PE	
Rated Grid Frequency [Hz]			50/60, ±5	
Max. Input Current [A]	40.0	63.0 [3]	63.0 [3]	63.0 [3]
Power Factor		1 (Adjustable from 0.8 leading to 0.8 lagging)		
EPS OUTPUT				
Max. Apparent Power [VA]	5000	8000	10000	12000
Load Start Capability [A]			122 @2s	
Rated Output Voltage [V]			220/230/240, L/N/PE	
Rated Grid Frequency [Hz]			50/60	
Max. Output Current for Backup Load (Bybass) [A]	40.0	63.0	63.0	63.0
Max. Output Current [A]	22.7	36.4	45.5	54.5
Power Factor		1 (Adjustable from 0.8 leading to 0.8 lagging)		
Parallel Operation			Yes @ Max. 3 pcs	
Switch Time [ms]			<4	
THDV [%]			<3 @linear load	
EFFICIENCY				
Max. Static MPPT Efficiency [%]			99.90	
Max. Conversion Efficiency [%]			97.62	
European Efficiency [%]			97.20	
Max. Battery Charge Efficiency (PV to BAT) (@ Full Load) [%]			97.33	
Max. Battery Discharge Efficiency (BAT to AC) (@ Full Load) [%]			96.40	

TECHNICAL SPECIFICATIONS

INVERTER MODEL	PQ1-5.0	PQ1-8.0	PQ1-10.0	PQ1-12.0
PROTECTION				
PV Reverse Polarity Protection		YES		
Anti-Islanding Protection		YES		
Output Short Protection		YES		
Leakage Current Protection		YES		
Insulation Resistor Detection		YES		
Overvoltage Category		YES		
Overcurrent Protection/Overtemperature Protection		YES		
Earth Fault		YES		
DC/AC Surge Protection		Type II (PV)/Type II (AC)		
AFCI Protection		Optional		
Battery Warming Function		Optional		
DC Switch		YES		
GENERAL DATA				
Dimensions (W*H*D) [mm]		570*420*380 (Inverter)		
Dimensions of Packing (W*H*D) [mm]		654*538*464 (Inverter)		
Net Weight [kg]		35.0 (Inverter)		
Gross Weight [kg]		40.5 (inverter)		
Installation		Floor-mounted		
Operating Temperature Range [°C]		-25 ~ +60 (Derating at 45)		
Storage Temperature [°C]		-10 ~ +55 (-25 ~ +55 after warm up)		
Storage/Operation Relative Humidity [%]		0 ~ 95 (No condensation)		
Altitude [m]		<4000 @ Derating Exceeding 2000		
Protection Class		I		
Overvoltage Category		III (AC), II (DC)		
Pollution Degree		PD3 (PD2 inside)		
Ingress Protection		IP66 (For Outdoor Use)		
Standby Consumption [W]		<15 (Only PV and Grid)		
Cooling	Natural	FAN cooling	FAN cooling	FAN cooling
Noise Emission (Average) [dB]	<35 [4]	<50 [4]	<50 [4]	<50 [4]
Inverter Topology		Non-Isolated		
Communication Interface		Ethernet, EMS(RS485), Meter, WiLAN(WiFi+LAN+Bluetooth), 4G(Optional), DRM, Ripple Control, USB, BMS(CAN), SG Ready		
Display		LED, LCD, App, Website		
Export Limit Control		YES		
Button		Capacitive Touch Sensor		
STANDARD				
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		AS/NZS 4777.2:2020		
Battery Regulation		IEC62619:2022		

[1] Voltages exceed 600V may damage the inverter.

[2] According to Australian standards, the maximum apparent power is 9999VA.

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

[4] Excludes wear parts such as LCD and fans.

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.