



Power Cube

THREE-PHASE **HYBRID**



FLEXIBLE APPLICATION

- 3 MPPTs, 20A per string.
- PV min. voltage of 120V and min. battery voltage of 80V.



EASY INSTALLATION

- Built-in gateway with 63A bypass for full house backup.
- No cables required between the inverter and batteries.



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 mode, dynamic trading and VPP.



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



Power cube 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:
au.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]	7.2	14.5	21.7
Max. Output Current (Per Phase) [A]	7.9	14.5	23.2
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)	
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		Active Frequency Drift with Positive Feedback	
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		TGHX3S-63P	
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	
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	IP66							
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	IP66							
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.