The Champion's Choice

Higher · Faster · Smarter

FOX ESS

Power Beast

COMMERCIAL AND INDUSTRIAL ENERGY STORAGE SYSTEM





DC & AC COUPLE SOLUTION

PV * EPS * Genset * EV Charger

SEAMLESS SWITCHING

Up to 0ms, without ATS

FLEXIBLE EXPANSION

On-Grid: Up to 12.5MW / 29.2MWh
Off-Grid: Up to 3MW / 8.7MWh

IP65 RATED

Warm up function

www.fox-ess.com

DATASHEET

TECHNICAL SPECIFICATIONS

MODEL	H3-50-Plus	H3-60-Plus	H3-80-Plus	H3-100-Plus	H3-125-Plus
PV INTPUT					
Max. Array Power [kW]	100	120	160	200	250
Max. Input Power [kW]	100	120	160	200	250
Withstand Voltage [V]			1000		
Input Voltage Range [V]			180 ~ 950		
Max. MPPT Input Current [A]			40		
Max. MPPT Short Circuit Current [A]			50		
MPPT Voltage Range [V]			180 ~ 850		
Start-up Voltage [V]			180		
No. of MPP Trackers	4	4	8	8	8
Strings per MPP Tracker			2		
BATTERY SPECIFICATION					
Battery Type			LFP ($LiFePO_4$)		
Voltage Range [V]			180 ~ 950		
Max. Charging/Discharging Current [A]			240 (80+80+80)		
Battery Port			3		
Communication			CAN*3		
AC OUTPUT (GRID)					
Nominal AC Power [kW]	50	60	80	100	125
Max. AC Output Power [kVA]	55	66	88	110	130*/137.5
Rated AC Output Current (Per Phase) [A]	76	91.2	121.6	152	190
Max. AC Output Current (Per Phase) [A]	83.6	100.3	133.7	167.2	198.5
Nominal AC Voltage [V]			380/400, 3W+N+PE or 3W+PE		
AC Voltage Range [Un]			0.8 ~ 1.2		
Nominal AC Frequency [Hz]			50/60		
Frequency Range [Hz]			50/60, ±5		
Power Factor			0.8 Leading ~ 0.8 Lagging		
THDi [%]			<3 @Rated Power		
AC INTPUT (GRID/GENERATOR)					
Max. AC Input Power [kVA]			207		
Max. Bypass Current [A]			300		
Nominal AC Voltage [V]			380/400, 3W+N+PE or 3W+PE		
Frequency Range [Hz]			50/60, ±5		
EPS OUTPUT (LOAD)					
Max. AC Output Power [kVA]	55	66	88	110	130*/137.5
Peak AC Output Power [kVA] (10s)			155		
LRA Current [A]			300		
Nominal AC Voltage [V]			380/400, 3W+N+PE or 3W+PE		
Nominal AC Frequency [Hz]			50/60		
Switching Time [ms][1]			Up To 0		
THDv [%]			<3 @Rated Power		
EFFICIENCY					
European Efficiency [%]			98.1		
Max. Efficiency [%]			98.5		
PROTECTION					
DC Input Switch			Yes		
Battery Reverse Polarity			Yes		
PV Reverse Polarity			Yes		
AC Overcurrent Protection			Yes		
AC Output Short Circuit Protection			Yes		
AC/DC Surge Protection			Class II		
ISO Detection			Yes		
Residual Current Detection			Yes		
Ground Fault Detection			Yes		
AFCI			Yes		
Terminal Overtemperature Protection			Yes		
String Current Detection			Yes		
GENERAL SEPECIFICATION					
Dimensions (W*H*D) [mm]			730*1060*305		
Weight [kg]	115	115	120	120	120
Operating Temperature [°C]			–30 ~ 60		
Cooling Method			Smart Air Cooling		
Operating Altitude [m]			4000		
Humidity [%]			0 ~ 100		
Noise [dB]			<70		
Standby Consumption [W]			<60		
DC-Link EV Charger Ready [kW]			20 ~ 50		
Ingress Protection (IP) Rating			IP65		
Topology			Non-Isolation		
Display			LED, LCD, Wi-Fi+APP		
Communication Ports			USB / RS485 / Bluetooth / Wi-Fi+LAN / 4G(Optional) / CAN		

* Only for Brazil

[1] Test condition: With the grid disconnected, both the rated power of the H3 Plus and the battery's output power capability shall exceed the total power demand of the backup loads.

TECHNICAL SPECIFICATIONS

MODEL	CQ7 -L4 -L4(w)	-L5 -L5(w)	-L6 -L6(w)	-L7 -L7(w)	-L8 -L8(w)	-L9 -L9(w)	-L10 -L10(w)	-L11 -L11(w)	-L12 -L12(w)	-L13 -L13(w)	-L14 -L14(w)
ELECTRICAL CHARACTERISTICS											
Battery Type	LFP ($LiFePO_4$)										
Battery Module (CQ7-M)	1										
Battery Module (CQ7-S)	3	4	5	6	7	8	9	10	11	12	13
Nominal Energy [kWh]	27.84	34.80	41.76	48.72	55.68	62.64	69.60	76.56	83.52	90.48	97.44
Nominal Voltage [V]	230.4	288.0	345.6	403.2	460.8	518.4	576.0	633.6	691.2	748.8	806.4
Operating Voltage [V]	208.8 ~ 919.8										
Recommend Charge/Discharge Current [A]	50										
Max. Charge/Discharge Current [A]*1	80										
Peak Discharge Current (60s) [A]	120										
Battery Pack Round-Trip Efficiency [%]*2	>95										
Depth of Discharge [%]	90										
Communication	CAN										
Display	CQ7-S: LED*1, CQ7-M: LED*6										
Scalability	Max. 14 Modules in Series										
OPERATING CONDITIONS											
Installation Location	Outdoor/ Indoor (Stand)										
Operating Temperature [°C]*3	Charge: 0 ~ 55, Discharge: -10 ~ 55										
Operating Temperature [°C] (warm up function on, optional)	Charge: -25 ~ 55, Discharge: -25 ~ 55										
Storage Temperature [°C]	-10 ~ 50										
Cooling Method	Natural Convection										
Humidity [%]	5 ~ 95 (No Condensation)										
Altitude [m]	Max. 3,000										
PROTECTION											
Fire Protection Function	YES										
MECHANICAL CHARACTERISTICS											
Dimensions (W*D*H) [mm]	660*730										
	*465	*620	*620	*775	*775	*930	*930	*1085	*1085	*1240	*1240
Weight [kg] (±5%)	206.5	257.0	307.5	358.0	408.5	459.0	509.5	560.0	610.5	661.0	711.5
Cell Net Weight [kg] (±5%)	144.7	180.9	217.1	253.3	289.4	325.6	361.8	398.0	434.2	470.3	506.5
CERTIFICATES											
Safety	IEC 62619, IEC 63056, IEC 62477-1, IEC 62040, UL 9540A, CE										
EMC	IEC 61000-6-1/2/3/4										
Transportation	UN38.3										
Ingress Protection	IP65										

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

*2 @25°C, 0.3C charging/discharging.

*3 Charge and discharge power reduction applies at low temperatures.

*4 Warm up function is available for, CQ7-L4 (w), CQ7-L5 (w), CQ7-L6 (w), CQ7-L7 (w), CQ7-L8 (w), CQ7-L9 (w), CQ7-L10 (w), CQ7-L11 (w), CQ7-L12 (w), CQ7-L13 (w), CQ7-L14 (w).