

*The
Champion's
Choice*



Higher · Faster · Smarter

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 3.125MW / 23.952MWh
Off-Grid: Up to 1.25MW / 9.58MWh



IP65 RATED

Warm up function (Optional)



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DATASHEET

TECHNICAL SPECIFICATIONS

MODEL	H3-50-Plus	H3-60-Plus	H3-80-Plus	H3-100-Plus	H3-125-Plus
PV INPUT					
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	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 INPUT (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	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		

[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	CQ20 / CQ20 (w) ^[4]
Nominal Energy [kWh]	19.96
Nominal Voltage [Vdc]	51.2
Operating Voltage [Vdc]	46.4 ~ 58.2
Recommend Charge/Discharge Current [A]	196
Max. Charge/Discharge Current [A] ^[2]	196/240
Peak Discharge Current [A]	431.2 @60S
Depth of Discharge [%]	95
Display	PACK: LED*1, CQ Plus-Box: LED*5
Scalability	Max. 16 Modules in Series
Installation Location	Indoor & Outdoor
Operating Temperature [°C]	Charge: 0 ~ 55, Discharge: -10 ~ 55
Operating Temperature [°C] ^[3] (warm up function on, optional)	Charge: -25 ~ 55, Discharge: -25 ~ 55
Storage Temperature [°C]	-10 ~ 55
Humidity [%]	5 ~ 95 (No Condensation)
Altitude [m]	Max. 3000
Cooling Method	Intelligent air cooling
Warming Function	Optional
Fire Protection Function	Yes
Dimension (W*H*D) [mm]	450*270*905
Weight Approximate [kg] (±5%)	150.0
Cell Net Weight [kg] (±5%)	110
Safety	IEC 62619
EMC	IEC61000-6-1/2/3/4
Transportation	UN38.3
Ingress Protection	IP66
MODEL	CQ Plus-Box
Rated Energy Range [kWh]	79.84~ 319.36
Operating Voltage Range [Vdc]	101 ~ 1000
Max. Charge/Discharge Current [A] ^[2]	240
Current Measurement Range [A]	-240 ~ +240
Total Voltage Measurement Accuracy [%FSR]	±0.5
Charge/Discharge Efficiency [%]	>93
Communication	CAN
Operating Temperature [°C] ^[3]	Charge: -25 ~ 55, Discharge: -25 ~ 55
Storage Temperature [°C]	-10 ~ 55
Humidity [%]	5 ~ 95 (No Condensation)
Dimensions (W*H*D) [mm]	920*230*888
Weight [kg] (±5%)	50
Ingress Protection	IP67
MODEL	CQ Plus-Base (Optional) ^[5]
Max. Charge/Discharge Current [A] ^[2]	240
Current Measurement Range [A]	-240 ~ +240
Operating Temperature [°C] ^[3]	Charge: -25 ~ 55, Discharge: -25 ~ 55
Storage Temperature [°C]	-10 ~ 55
Humidity [%]	5 ~ 95 (No Condensation)
Dimensions (W*H*D) [mm]	920*230*888
Weight [kg] (±5%)	42
Ingress Protection	IP67

* Min. 4 batteries per system.

[2]The current is affected by temperature, cell voltage and SOC.

[3]Charge and discharge power reduction applies at low temperatures.

[4] Warm up function is available for, CQ20 (w).

[5]When the number of slave batteries > 8, this option is recommended to reduce installation height and facilitate installation.