

Hybrid Ess Cabinet

50-125kW

215kWh

Version 1.6-2605

Design and specifications are subject to change without notice



Safe & Reliable

- Five-Level Safety Design
- 300m AFCI Detection with 0.5s Rapid Shutdown
- Support Three-Phase Unbalance Output
- IP66 for Inverter, IP54 for Cabinet



Convenient & User-Friendly

- Compact & Lightweight Design, Pre-Installed for Easy Installation
- Flexible Parallel Connection of Cabinets
- App-Based Quick Setup, Simple and Efficient



Profitable & Efficient

- PV-ESS Integrated, Lower System Cost
- AI Dynamic MPPT, Boosting Power Generation by 5%
- DC Coupled Solution, Higher System Efficiency



Smart & Manageable

- Three-Phase Wiring Sequence Adaptive, Easy Aystem Wiring
- Support on&off Grid Switching, Suitable for Various Application Scenarios
- Real-Time Monitoring with OTA for Online Maintenance

Technical Specifications

Hybrid ESS Cabinet Inverter

Product model	HYX-H50K-ET	HYX-H75K-ET	HYX-H99K9-ET
DC Input (PV)			
Max. Input Voltage		1100Vd.c. ¹	
Rated Input Voltage		650Vd.c.	
Start-up Voltage		160Vd.c.	
MPPT Operating Voltage Range		140Vd.c. ~ 1,000Vd.c.	
Max. Input Current per MPPT		40Ad.c.	
Max. Input Current per String		20Ad.c.	
Max. Short-circuit Current per MPPT		50Ad.c.	
Number of MPPT	4	6	8
Number of Input	8	12	16
Max. Backfilling Current		0Ad.c.	
DC Input (Battery)			
Rated Input Voltage		768Vd.c.	
Battery Voltage Range		600V ~ 950Vd.c.	
Max. Charge/Discharge Current	80.8Ad.c.	121.3Ad.c.	161.7Ad.c.

Technical Specifications

Hybrid ESS Cabinet Inverter

Product model	HYX-H50K-ET	HYX-H75K-ET	HYX-H99K9-ET
AC Output			
AC Output Power	50kW	75kW	99.9kW
Max. Apparent Power	55kVA	82.5kVA	109.9kVA
Rated Output Voltage	220/380Va.c., 230/400Va.c., 3L/N/PE		
AC Grid Frequency	50/60Hz		
Rated Output Current	75.9Aa.c./380Va.c. 72.1Aa.c./400Va.c.	113.9Aa.c./380Va.c. 108.2Aa.c./400Va.c.	151.9Aa.c./380Va.c. 144.3Aa.c./400Va.c.
Max. Output Current	83.5Aa.c./380Va.c. 79.4Aa.c./400Va.c.	125.3Aa.c./380Va.c. 119.0Aa.c./400Va.c.	167.1Aa.c./380Va.c. 158.7Aa.c./400Va.c.
Adjustable Power Factor	0.9 leading...0.9 lagging		
Three Phase Unbalanced Output	100% Unbalanced Output		
THDi	< 3%		
Efficiency			
Max. Efficiency	98.5%		
European Weighted Efficiency	98.0%		
MPPT Efficiency	99.9%		
Protection			
Active Anti-islanding Protection	YES		
Residual Current Monitoring	YES		
DC Reverse Polarity Protection	YES		
DC Switch	YES		
DC Overvoltage Protection	YES		
DC Overcurrent Protection	YES		
AC Overfrequency/Underfrequency Protection	YES		
AC Short-Circuit Protection	YES		
AC Overvoltage Protection	YES		
AC Overcurrent Protection	YES		
DC Surge Protection	Type II		
AC Surge Protection	Type II		
Ground Fault Detection	YES		
AFCI	Optional		
PID Recovery	Optional		
General Data			
Operating Temperature Range	-30 to +60°C		
Relative Operating Humidity	0 ~ 100% RH		
Max. Operating Altitude	4000m		
Cooling	Smart Air Cooling		
Display	LED+APP		
Communication	RS485/4G/WIFI/HPLC		
Weight	95kg		
Dimensions (W × H × D)	880 × 760 × 340mm		
Topology	Non-Isolated		
Degree of Protection	IP66		

1: When connected to the battery cabinet, the maximum PV input voltage is 650V.

Technical Specifications

Hybrid ESS Cabinet Inverter

Product model	HYX-H100K-ET	HYX-H110K-ET	HYX-H125K-ET
DC Input (PV)			
Max. Input Voltage		1,100Vd.c. ¹	
Rated Input Voltage		650Vd.c.	
Start-up Voltage		160Vd.c.	
MPPT Operating Voltage Range		140Vd.c. ~ 1,000Vd.c.	
Max. Input Current per MPPT		40Ad.c.	
Max. Input Current per String		20Ad.c.	
Max. Short-circuit Current per MPPT		50Ad.c.	
Number of MPPT		8	
Number of Input		16	
Max. Backfilling Current		0Ad.c.	
DC Input (Battery)			
Rated Input Voltage		768Vd.c.	
Battery Voltage Range		600Vd.c. ~ 950Vd.c.	
Max. Charge/Discharge Current	161.7Ad.c.	177.9Ad.c.	183.8Ad.c.
AC Output			
AC Output Power	100kW	110kW	125kW
Max. Apparent Power	110kVA	121kVA	125kVA
Rated Output Voltage	220/380Va.c., 230/400Va.c., 3L/N/PE		
AC Grid Frequency	50/60Hz		
Rated Output Current	151.9Aa.c./380Va.c. 144.3Aa.c./400Va.c.	167.1Aa.c./380Va.c. 158.7Aa.c./400Va.c.	189.9Aa.c./380Va.c. 180.4Aa.c./400Va.c.
Max. Output Current	167.1Aa.c./380Va.c. 158.7Aa.c./400Va.c.	183.8Aa.c./380Va.c. 174.6Aa.c./400Va.c.	189.9Aa.c./380Va.c. 180.4Aa.c./400Va.c.
Adjustable Power Factor	0.9 leading...0.9 lagging		
Three Phase Unbalanced Output	100% Unbalanced Output		
THDi	< 3%		
Efficiency			
Max. Efficiency	98.5%		
European Weighted Efficiency	98.0%		
MPPT Efficiency	99.9%		
Protection			
Active Anti-islanding Protection	YES		
Residual Current Monitoring	YES		
DC Reverse Polarity Protection	YES		
DC Switch	YES		
DC Overvoltage Protection	YES		
DC Overcurrent Protection	YES		
AC Overfrequency/Underfrequency Protection	YES		
AC Short-Circuit Protection	YES		
AC Overvoltage Protection	YES		
AC Overcurrent Protection	YES		
DC Surge Protection	Type II		

Technical Specifications

Hybrid ESS Cabinet Inverter

Product model	HYX-H100K-ET	HYX-H110K-ET	HYX-H125K-ET
AC Surge Protection	Type II		
Ground Fault Detection	YES		
AFCI	Optional		
PID Recovery	Optional		
General Data			
Operating Temperature Range	-30 to + 60°C		
Relative Operating Humidity	0 ~ 100% RH		
Max. Operating Altitude	4000m		
Cooling	Smart Air Cooling		
Display	LED+APP		
Communication	RS485/4G/WIFI/HPLC		
Weight	95kg		
Dimensions (W × H × D)	880 × 760 × 340mm		
Topology	Non-Isolated		
Degree of Protection	IP66		

1: When connected to the battery cabinet, the maximum PV input voltage is 650V.

Technical Specifications

Hybrid ESS Cabinet Battery

Product model	HYX-BOA215
Technical Parameter	
Battery Type	LiFePO4
Battery Module Capacity	14.3kWh
Battery Module Nominal Voltage	51.2Vd.c.
Battery Module Qty In Series	15
System Nominal Voltage	768Vd.c.
System Operating Voltage	672Vd.c. ~ 864Vd.c.
System Capacity	215kWh
Charge/Discharge Current	Recommend: 140Ad.c./Maximum: 170Ad.c. (60s)
Calendar Life	≥ 6000 (25±2°C, 0.5C/0.5C, 70%EOL)
General Parameter	
Operating Temperature Range	Charge: 0 to +55°C/Discharge: -20 to +55°C
Operating Humidity Range	0 ~ 95% RH
Max. Operating Altitude	≤2000m
Cooling Method	Smart Air Cooling
Protection Degree	IP54
Dimensions (W × H × D)	1440 × 2200 × 1170mm
Weight	2700kg
Communication	CAN
Installation Location	Outdoor
Fire Protection Method	Aerosol Fire Suppression
Networking Mode	WIFI/LAN