HBD-500-1000

A Series

Design Standards

HBDⓐ Series is a new range of secure, integrated battery energy storage systems. This modular solution includes batteries, PCS, LCAC, FSS, and EMS, with optional components such as STS, PV inverters, PV modules, ATS and auxiliary units to meet diverse application needs. Emergency backup, peak shaving, Arbitrage, Grid Service, Self-consumption

Benefits

- High Energy Density: Top-tier 314Ah LFP cells
- Comprehensive Safety Protection: Multi-layer protection
- High Compatibility: Compatible with multiple electrical solutions
- Intelligent Operation: Smart EMS

Warranty

3 years after export from the factory or the Energy Throughput achieve 4590kWh per kWh which comes first.



HBD-500-1000

General Information		HBD-500-1000
Rated Output Power@25℃		500kVA
Rated Power Factor		1 lagging~1 leading
Rated Output Voltage		380V@50Hz/60Hz, 3ph. (400V & 415V available)
Rated Battery Storage Capacity		1045kWh
Output	Terminals	Copper Busbar
	Sockets	Option
Protection Class		IP54
Loading Dimension (W*D*H)		4800*2250*2250mm
Net. Weight		14000kg
Loading Capacity	20'GP	1 unit
	40'HC	NA
Discharge Temperature Range		-20~50℃ (> 45℃ derating)
Max Altitude		3000m (> 2000m derating)

ISO 9001:2015 ilac-MRA CE



Battery	HBD-500-1000
Cell Type	LFP ($LiFePO_4$)
Pack Capacity	52.25kWh
Pack Rated Voltage	166.4Vdc
Cyclic Life	8000 Times (0.5C@90%DOD)
Battery Voltage of Rack	832Vdc
Connection of Rack	5S1P
PCS	
Max. Current (AC)	800A
Max. Output Power	550kVA
Rated Output Power	500kW
AC Input Voltage Range	400Vac (-15%~+15%)
Rated Frequency Range	50/60Hz (±2.5Hz)
PF	1 lagging~1 leading
AC Connection	3W+N+PE
Max. Efficiency	98.5%
Transformer	N/A
Communication	CAN/RS485/Ethernet
Grid-tied Certificates	EN50549, NRS 097, C10/11, VDE4105, G99, AS4777, IEC61727&62116, CEI 0-21, Austria TOR EZA Type A&B, 217001/2, NTS631, The Saudi Arabian
Safety & EMC Certificates	IEC61000, IEC62477
Cooling System	
Cooling Type	LCAC
Fire Protection	
Type	Aerosol (CE)
EMS	
Display and Monitor	Local screen
Function	Energy management and coordinated control of energy storage system

aksa BESS



HBD-500-1000



1 Liquid Cooling System $LiFePO_4$ BATTERY Long Life Design
Up to 8000 cycles
High Quality Based on Specification Consistency of CELLS~!
All-in-One Design
INTELLIGENT PCS with EMS
EASY OPERATION ON ONE SCREEN.



2 C-3 Level Anti-Corrosion Suitable With Heavy Duty
Fits the practical application & guaranteed by high quality manufacturing technology.

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GENSET
Power Consumption



LOAD
Remote Monitoring & Control

HBD



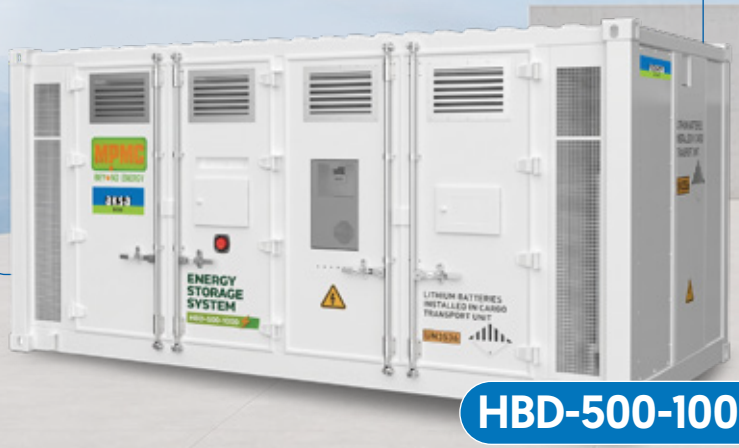
MDB



CLOUD
Remote Monitoring & Control



INVERTER
Remote Monitoring & Control



HBD-500-1000



PV
Renewable Energy



GRID
Backup Power

ALL-IN-ONE SOLUTION

BATTERY STORAGE
Reliable & Safe

EMS
Smart Energy Management

PCS
Bidirectional Power Conversion

REMOTE CONTROL
Monitor Anytime, Anywhere