Hoymiles

HOYMILES UITILITY ENERGY STORAGE INTEGRATED SYSTEM

SMART STORAGE FOR THE FUTURE · COMPREHENSIVE PROTECTION

OPEN ENERGY FOR ALL



HOYMILES.COM

About Hoymiles

Hoymiles Power Electronics Inc. (Stock Code: 688032) was established in 2012 and is a global leading provider of smart PV and energy storage solutions. The company's products include PV inverters, power conversion systems, and energy storage systems, widely used in diverse scenarios such as DIY, Residential, C&I, and Utility power plants.

Hoymiles has won numerous domestic honors, such as "National High-Tech Enterprise" and "National Key Software Enterprise", and has also gained international recognition, such as "Bloomberg New Energy Finance (BNEF) Tier 1 Energy Storage Manufacturer". It has become one of the representative enterprises in the photovoltaic and energy storage field with both technological innovation and market leadership advantages.

2012
Established

190+
Countries and Regions Where Products Are Installed

1900+
Global Employees

Tier 1
BNEF2025 Tier 1 Global Energy Storage Manufacturer

35%
R&D Personnel Ratio

300+
Global Patents and Software Copyrights

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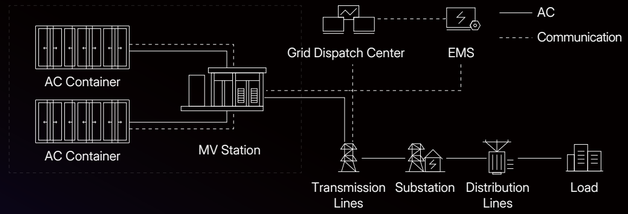
Hoymiles provides plant owners with devices such as PCSs, PCS-MV Stations, and battery containers to create integrated and high-efficiency generation-side energy storage solutions. The products are suitable for various application scenarios, meeting generation-side energy storage needs of different scales, featuring intelligent control and rapid response, enabling integrated management for customers.

AC-Block Modular BESS



Products Offered by Hoymiles







Solution Advantages

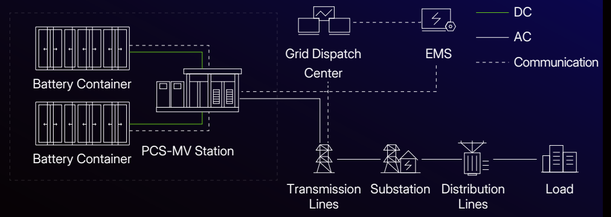
Efficiency by Design
- ***Rack-level management, higher system utilization***
- ***Integrated design, saving 50% on-site commissioning time***
- High energy density design, less footprint, saving 20% project construction cost
- Full liquid cooling intelligent temperature control technology on AC/DC sides, reducing auxiliary power consumption, extending system life

Built for Extremes
- ***Modular design, faults can be isolated independently***
- Stable operation at 5000 m altitude
- Supports parallel connection of multiple units, system power easily expandable
- No derating at 50°C high ambient temperature

Effortless Maintenance
- ***PCS supports hot swapping and on-load isolation***
- Unified interfaces, simplifying on-site delivery process
- Automatic fluid replacement, no manual intervention required
- AI-powered management, reducing O&M frequency

Uncompromising Safety
- ***Higher system online rate***
- ***Lower risk of arcing***
- Multiple insulation redundancy design, ensuring system safety
- Four-level short-circuit protection design, minimizing system risk
- Three-level fire suppression system, rapidly suppressing thermal runaway and propagation

DC-Coupled Battery+Centralized PCS



Products Offered by Hoymiles







Solution Advantages

Reach Peak ROI
- High energy density design, less footprint, saving 15% project construction cost
- Full liquid cooling intelligent temperature control technology on AC/DC sides, reducing auxiliary power consumption, extending system life

Extreme Adaptability
- Stable operation at 5000 m altitude
- No derating at 50°C high ambient temperature
- Supports parallel connection of multiple units, system power easily expandable

Smart O&M
- Unified interfaces, simplifying on-site delivery process
- Automatic fluid replacement, no manual intervention required
- AI-powered management, reducing O&M frequency

Multi-Layered Protection
- Multiple insulation redundancy design, ensuring system insulation safety
- Four-level short-circuit protection design, minimizing short-circuit risk
- Three-level fire suppression system, rapidly suppressing thermal runaway a nd propagation

Technical Parameters

Model		HoyPrime 5MW/10MWh Energy Storage System	
		Centralized PCS	String PCS
DC Side			
	Battery type	LFP 3.2 V/ 314 Ah	
	Combination	12P416S*2	
	Rated energy (MWh)	10.03	
	Rated voltage (V)	1331.2	
	Rated charge (discharge) rate	0.5C	
	Operating voltage range (V)	1164.8–1497.6	
	Cycles	8000	
	Fire suppression system	Aerosol + Water fire suppression	
	Detector type	Temperature sensor, smoke sensor, combustible gas sensor	
AC Side			
	Rated power (MW)	2.5*2	0.46*12
	Rated AC voltage (V)	690, three-phase three-wire	
	Boost transformer voltage range (kV)	10–35	
	Rated frequency (Hz)	50/60	
	Current harmonic	< 3% (linear load)	
	DC current component	≤ 0.5%	
	Power factor	> 0.99 (rated power)	
	Maximum conversion efficiency	99%	
System data			
	Operating temperature range	≤ -30°C to 55°C (derated above 50°C)	
	Noise (dB)	< 80	
	Dimensions (W × D × H mm)	Battery compartment: 6058*2438*2896×2 PCS-MV Station: 6300*3200*3100	Battery compartment: 6058*2438*2896×2 PCS-MV Station: 5000*3200*3100
	Weight (T)	2×43+25	2×44.5+23
	Anti-corrosion grade	C4/C5 (optional)	
	IP rating	Battery compartment: IP54; PCS: IP65	
	Operating humidity	0–95% (non-condensing)	
	Operating altitude (m)	< 5000 (derated above 3000)	
	Cooling method	Liquid cooling	
	Communication interface	CAN, Ethernet, RS-485	
	Communication protocol	Modbus TCP/RTU, IEC 61850 GOOSE	
System running mode			
	Peak-load shifting	Available	
	On-demand control	Available	
	Black start	Available	
Certification Standards			
	BMS	UL 60730	
	Battery	IEC 62619, UL 1973, UL 9540A	
	PCS	EN 50549, IEC 62477, IEC 61000	

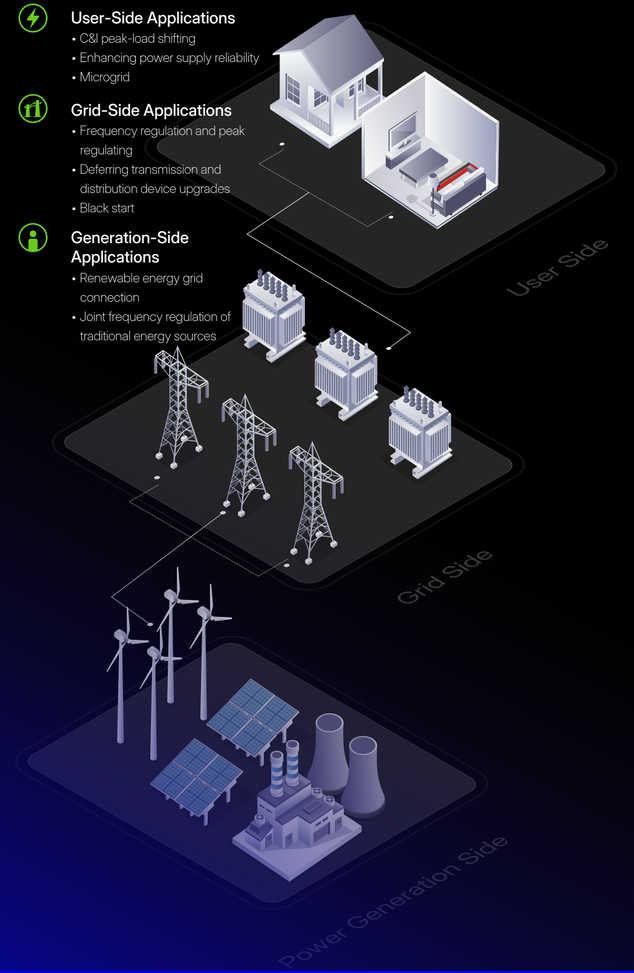
Application Scenarios

The core value of utility-scale energy storage system lies in resolving the supply-demand imbalances across electricity generation, transmission, distribution, and consumption.
It is not only a key technology for achieving high penetration of renewable energy integration, but also an important infrastructure for enhancing grid intelligence, flexibility, and reliability, playing an increasingly indispensable role in the global energy transition.

User-Side Applications
- C&I peak-load shifting
- Enhancing power supply reliability
- Microgrid

Grid-Side Applications
- Frequency regulation and peak regulating
- Deferring transmission and distribution device upgrades
- Black start

Generation-Side Applications
- Renewable energy grid connection
- Joint frequency regulation of traditional energy sources



Customer Stories



• Zhangjiakou, Hebei • 150 MW/300 MWh



• Wulian, Shandong • 18 MW/36 MWh



• Zhangye, Gansu • 10 MW/20 MWh



• Dengfeng, Henan • 45 MW/133 MWh



• Shantou, Guangdong • 41 MW/41 MWh



• Latvia • 10.32 MW/20.64 MWh



• Sihui, Guangdong • 30 MW/60 MWh



• Jinchang, Gansu • 50 MW/100 MWh