

Containerized Battery Energy Storage System

HoyPrime 5MW/10MWh

Cost-effective and Efficient

- Higher energy density with a reduced footprint, achieving 15% savings in construction costs.
- DC-Side Intelligent liquid cooling reduces auxiliary power consumption and extends lifespan.

Safe and Reliable

- Multi-layer insulation and four-level short-circuit protection enhances safety and reliability.
- A multi-level water fire suppression system integrated with pressure relief design ensures rapid response to fire and explosion.
- Proactive detection capability enables early identification of thermal runaway and prevents its propagation.

Scalable and Optional

- C5 anti-corrosion combined with stable high-altitude operation ensures adaptability to multiple harsh environment.
- Supports multi-unit parallel connection for scalable system power expansion.

Smart and Friendly

- Unified interface to simplify the delivery process.
- Automatic fluid replenishment, no manual intervention.
- Big data analytics enables proactive anomaly detection and resolution, reducing O&M frequency.

Region: Global Version: REV1.1

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Technical Specifications

Model	HoyPrime 5MW/10MWh
DC Side	
Battery Type	LFP
Configuration	12P416S x 2
Rated Energy (MWh)	10.03
Rated DC Voltage (V)	1331.2
Rated Power (MW)	5
Rated Charge/Discharge Rate	0.5C
Operating Voltage Range (V)	1164.8 - 1497.6
Standard Charge/Discharge Current (A)	1884 × 2
Cooling Mode	Liquid Cooling
Coolant	Ethylene Glycol: Aqueous Solution (50%v: 50%v)
Cycles	8000
Fire Extinguisher	Perfluorohexanone / Heptafluoropropane (Optional) + Water Fire Fighting
Detector Type	Temperature Detector, Smoke Detector, Combustible Gas Detector
AC Side	
Rated AC Power (MW)	2.5 × 2
Rated AC Voltage (V)	690, 3P3W
Grid Voltage Range (kV)	10 - 35
Grid Frequency (Hz)	50/60
THDi	< 3% (Linear load)
DC Component of AC-Side Voltage	< 0.5% U_n (Balanced linear load)
Power Factor	> 0.99 (@nominal power)
Maximum Conversion Efficiency	99%
System Data	
Operating Temperature Range (°C)	-30°C to 55°C(> 45°C, derating operation)
Noise (dB)	< 80
Dimensions (W × D × H [mm])	Battery Compartment: 6058 × 2438 × 2896 * 2 PCS -MV Station: 6300 × 3200 × 3100
Weight (T)	2 × 43 + 25
Anti-corrosion Degree	C4/C5 (Optional)
IP Rating	Battery Container: IP54 ; PCS: IP65
Relative Humidity	0 to 95% (non-condensing)
Standard Altitude (m)	≤ 3000
Charging/Discharging Efficiency	86%
Communication Interface	CAN, Ethernet, RS485
Communication Protocol	ModbusTCP/RTU, IEC61850, Goose
Features	
Peak Shaving and Valley Filling	Integrated
Demand Control	Integrated
Economic Operation Mode	Integrated
Reactive Power Regulation	Integrated
Grid Dispatch Interface	Integrated
Remote Dispatch Interface	Integrated
Local Data Storage	Integrated
Standard and Regulation	
BMS	GB/T34131, UL60730
Battery	GB/T 36276, IEC62619, UL1973, UL9540A
PCS	GB/T 34120, GB/T 34133, EN50549, IEC62477, IEC61000

* Subject to change without notice.

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