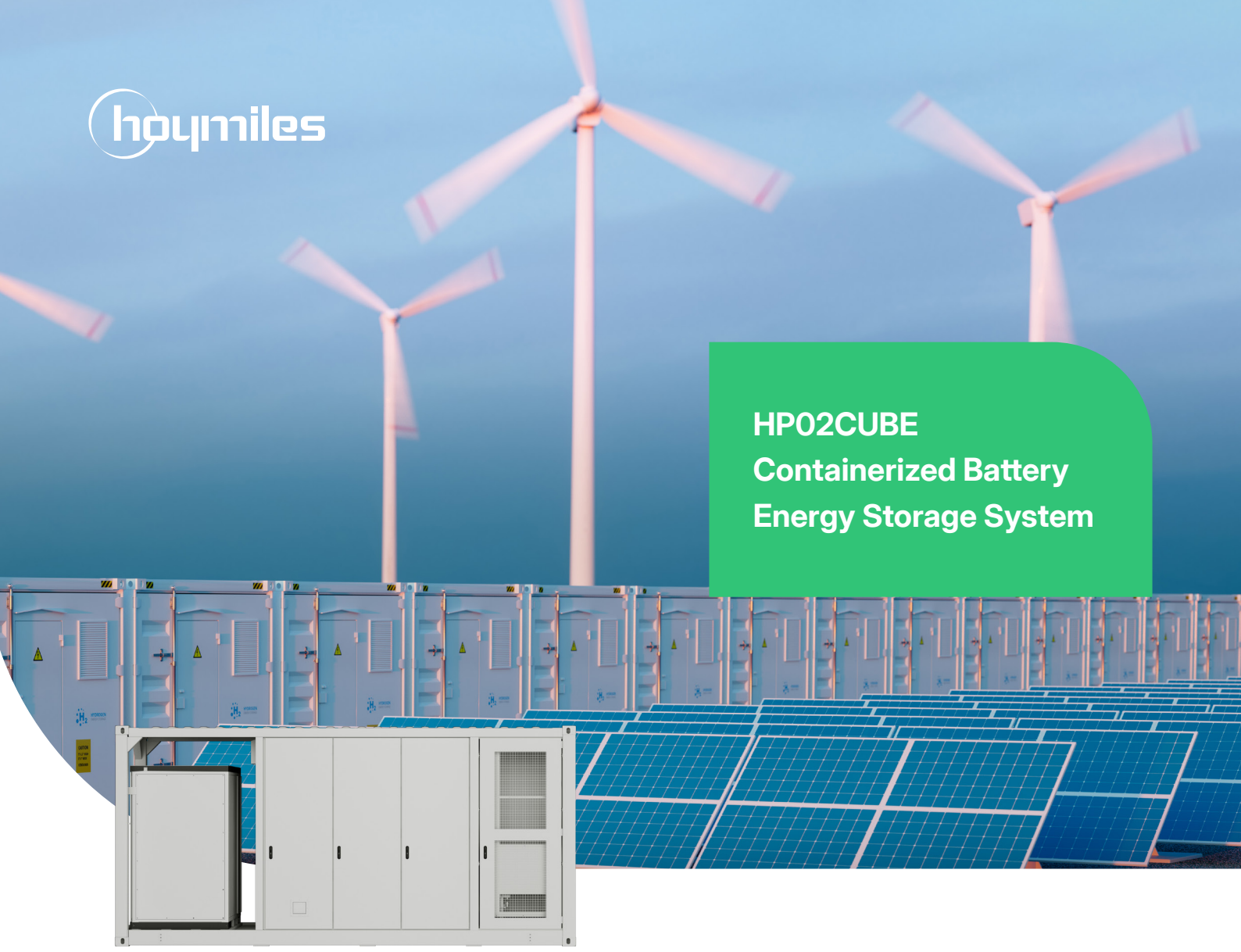

HP02CUBE
Containerized Battery Energy Storage System

** Images displayed are for illustration purposes only. Product appearances and design are subject to change without notice and may vary from those shown.*

Cost-effective and Efficient

- *Intelligent liquid cooling reduces auxiliary power consumption and extends lifespan.*
- *The compact, non-walk-in design increases energy density in a smaller footprint.*

Safe and Reliable

- *Multi-layer insulation enhances safety.*
- *Three-level short-circuit protection minimizes risks.*
- *A comprehensive three-level fire protection system ensures swift suppression of thermal runaway.*

Smart and Friendly

- *Comprehensive cell status monitoring provides early warnings for potential issues.*
- *High-level protection ensures performance in extreme environments.*
- *Standardized external interfaces simplify on-site installation.*

Easy Maintenance

- *Automatic coolant replenishment, fault reporting, and SOC calibration eliminate the need for manual intervention or system downtime.*

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Technical Specifications

Model	HoyPrime 1MW/2MWh Containerized Battery Energy Storage System
DC side	
Battery Type	LFP (Lithium Iron Phosphate)
Configuration	6P384S
Rated Energy (MWh)	2.064
Rated DC Voltage (V)	1228.8
Rated Charge/Discharge Rate	0.5C
Operating Voltage Range (V)	1075.2 to 1382.4
Standard Charge/Discharge Current (A)	840
Cooling Mode	Liquid Cooling
Coolant	Ethylene Glycol: Aqueous Solution (50%v: 50%v)
Cycles	8000
Fire Extinguisher	NOVEC1230 (Perfluorohexanone) / FM200 (Heptafluoropropane), Water Fire Fighting
Detector Type	Temperature Detector, Smoke Detector, Combustible Gas Detector
AC Side	
Rated AC Power (MW)	1
Maximum AC Power (MW)	1.1
AC Connection Type	Three Phase, Three Wire
Rated Grid Voltage (kV)	0.69
Rated Grid Frequency (Hz)	50/60 (-2.5 to 2.5)
Total Harmonic Distortion (@ nominal power)	<3%
Power Factor (@nominal power)	> 0.99
Voltage Regulated Accuracy	≤±1.5%
Current Regulated Accuracy	≤±1%
Maximum Conversion Efficiency	99%
Cooling Mode	Liquid Cooling
AC Side	
Operating Temperature Range (°C)	-30 to 55 (> 45°C derating)
Noise (dB)	<80
Dimensions (L × W × H [mm])	6058 × 2896 × 2438
Weight (T)	28±0.5
Anti-corrosion Degree	C4/C5
IP Rating	Battery Compartment: IP54/IP55 (optional); Electrical Compartment: IP54; PCS: IP54
Relative Humidity	0 to 95% (non-condensing)
Standard Altitude (m)	≤ 3000 (>3000 m derating)
Charging/Discharging Efficiency	≥93%, (25°C ± 2°C, 0.5C)
Communication Interface	CAN, Ethernet, RS485
Communication Protocol	Modbus TCP/RTU, IEC 61850, GOOSE
Features	
Peak Shaving and Valley Filling	Yes
Demand Control	Yes
Economic Operation Mode	Yes
Reactive Power Regulation	Yes
Grid Dispatch Interface	Yes
Remote Dispatch Interface	Yes
Local Data Storage	Yes
Compliance	
BMS	GB/T 34131-2023, IEC/UL 60730
Battery	GB/T 36276-2018, IEC 62619, UL 1973, UL 9540A
PCS	IEC 61000, VDE-AR-N 4110: 2018, VDE-AR-N 4120: 2018, G99, NTS 631 V2.1 (Type B/C/D), GB/T 34120-2017, GB/T 34133-2017, IEC 62477-1, EN 50549

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