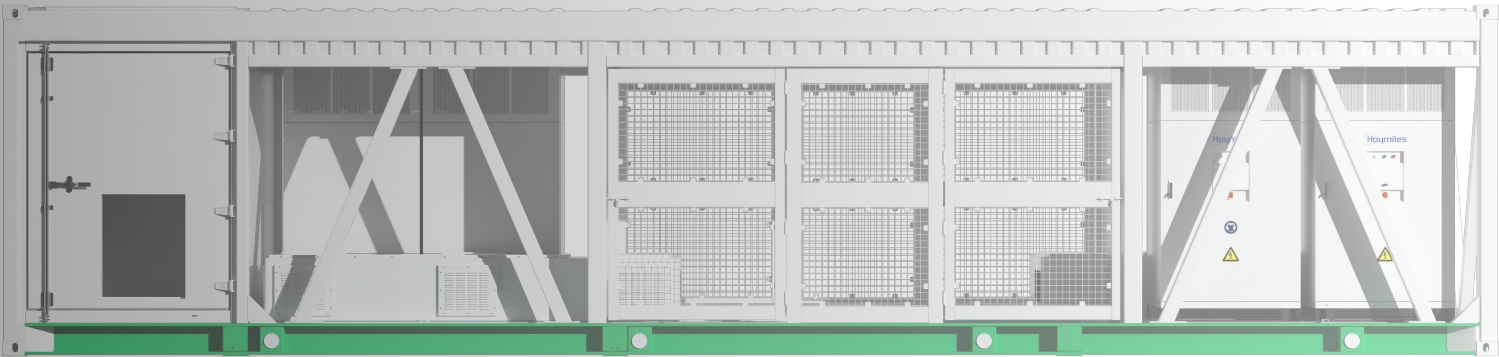




HIM5175MV PCS-MV Station

HIM5175MV integrates PCS, transformer, RMU, BSP, FFS and SS system, these devices are unified through EMU or local controllers. Suitable for 15MWh battery container with 314/320Ah cell integration; Standardized communication interfaces and protocols; Supports AC 10kV to 35kV access to the grid; Easy transportation and installation due to integrated and skid-mounted design.



Compact construction, efficient conversion

- Industry-leading power density, 20% savings in floor space
- ANPC topology, PCS peak efficiency > 99%
- Intelligent liquid cooling, no derating up to 45°C
- Full power operation at DC 1500 V



Multi-scene applications

- Supports on-grid, off-grid, and hybrid (on/off-grid) modes
- Operable in high-altitude, high-salt, high-temperature and extremely-low-temperature scenarios
- Four-quadrant operation, constant voltage, constant current and constant power in battery charge/discharge
- Supports VSG control



Grid friendly, stable support

- Support primary frequency regulation and rapid voltage adjustment
- Support L/HVRT, stable operation in weak grid, efficient and adaptable
- Charge/discharge switching time <20ms, support GOOSE, response time <25ms
- Grid black start function integrated

Technical Specifications

Model	HIM5000MV
DC Side	
DC voltage range	1000 ~ 1500V
Maximum continuous DC-side current	1936A × 3
Number of inputs (PCS number × Per-PCS inputs)	3 × 1
PCS AC Side (On-Grid)	
Rated output power	5175kVA
Maximum continuous output power	5692.5kVA
Rated current	4329A
Maximum continuous AC-side current	4764A
Rated AC voltage	690V
AC voltage range	586.5 ~ 759V
Rated grid frequency / grid frequency range	50Hz / 45 ~ 55Hz
AC current harmonic	< 3% (@rated power)
Power factor	> 0.99 (@rated power)
Reactive power adjustment range	-105% ~ 105%
Grid type	3P3W
PCS AC Side (Off-Grid)	
Rated AC voltage	690V
AC voltage range	586.5 ~ 759V
Rated grid frequency / grid frequency range	50Hz / 45 ~ 55Hz
AC Voltage harmonic	< 3% (Linear load)
DC component of AC-side voltage	< 0.5% Un (balanced linear load)
Unbalance load capacity	100%
RMU	
General data	20~36kV,630A,20kA/3s
Transformer	
Rated capacity	5175kVA
Maximum capacity	5700kVA
Primary / secondary voltage	10~35kV / 0.69kV
Winding type	Dy11
Protection and Overload	
DC input / reverse polarity protection	Load switch + Fuses
AC output protection	Circuit breaker
Surge protection	DC Type II / AC Type II
Grid monitoring and grounding fault monitoring	Integrated
Insulation monitoring	Integrated
Overheat and overtemperature protection	Integrated
Short circuit protection	Integrated
Communication failure protection	Integrated
Overload capacity	Operate for a long time at 1.1 times the rated load. Operate for no less than 2 minutes at 1.2 times the rated load.
General Data	
Dimensions (W×H×D)	12192mm×2896mm×2438 mm
Weight	~22t (Al Windng / Oil-type transformer)
Operating temperature	-35 ~ +60°C
Operating humidity	0 ~ 100%RH (non-condensing)
Altitude	≤4000m (> 3000m, derating operation)
IP rating	IP54 (PCS : IP65)
Cooling method	Intelligent liquid cooling
Display and Communication	
Display	HMI+LED
Communication interface	RS485, CAN, Ethernet
Communication protocol	ModbusRTU, CAN2.0, ModbusTCP, IEC61850
Standard and Regulation	
Compliance	IEC/EN 62477, IEC/EN 61000, IEC/EN 50549

* Subject to change without notice.