

Turtle CL2.5 Series



AC/DC Integrated Containerized BESS

1MW / 1.67MWh

1MW / 2.089MWh

1MW / 2.5MWh

Up to 2.5MWh
in a 20-ft Container

◆ Typical Applications

- C&I Energy Storage
- PV + Storage Systems
- PV + Storage + Diesel Hybrid Systems
- Microgrid & Weak-Grid Applications
- Backup Power for Critical Loads



◆ Customer Value

Compact AC/DC Integration

Battery system, PCS, liquid cooling and power distribution integrated in one container.

Reliable Power Delivery

Supports stable operation across diverse C&I power scenarios.

Flexible Project Deployment

Reduce harmonics, support unbalanced and overload conditions.

Improved Power Quality

Optional transformer configuration helps reduce harmonics and stabilize voltage output.

◆ Key Highlights

AC/DC Integrated Architecture

- Integrated battery system, PCS, liquid cooling and power distribution
- Optional AC-side equipment based on project requirements
- Reduced onsite installation and commissioning work

Flexible System Configuration

- Supports grid-tied, off-grid and on/off-grid switching applications
- Optional STS, ATS, transformer, PV and diesel generator interfaces
- Adaptable to C&I, microgrid and backup power projects

Safe & Stable Operation

- Multi-layer electrical, thermal and fire safety protection
- Intelligent liquid cooling for better temperature consistency
- Fire detection, explosion ventilation and fire suppression design

High Energy Density

- Powered by 314Ah LFP battery cells
- Up to 2.5MWh in a standard 20-ft container
- High efficiency, long cycle life and compact footprint

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Turtle CL2.5 Series



On/Off-Grid Switching Version

Designed for applications requiring high power reliability, this version supports seamless coordination between the utility grid, BESS, PV and diesel generator. It is ideal for critical loads, industrial parks, weak-grid areas and hybrid microgrids.

◆ Key Highlights

- **Seamless power switching**

Integrated STS + ATS enables fast switching between grid, storage, PV and diesel generator.

- **Multi-energy integration**

Supports utility, PV, BESS and diesel generator access for hybrid energy systems.

- **Strong load adaptability**

Supports overload, surge loads and three-phase unbalanced loads.

- **Reliable backup power**

Maintains stable power supply when the grid is unstable or unavailable.

- **Enhanced power quality**

Isolation transformer helps reduce harmonics and stabilize output voltage.

◆ Product Parameters

	Model	Turtle CL2.5	Turtle CL2.089	Turtle CL1.67
DC Side Parameters	Battery Type	LFP 314Ah	LFP 314Ah	LFP 314Ah
	Configuration	2.507MWh/6P416S	2.089MWh/5P416S	1.67MWh/4P416S
	DC Voltage Range	1164.8V ~ 1497.6V	1164.8V ~ 1497.6V	1164.8V ~ 1497.6V
PCS Parameters	Quantity	6	5	4
	Power	1500kW	1250kW	1000kW
STS Parameters	Power	1000kW		
ATS Parameters (Optional)	Power	1000kW		
Grid / Diesel Generator Port (Optional)	AC Rated Input Power	1000kW		
	Rated Voltage	400V, 50/60Hz		
Transformer	Power & Voltage	1250kVA / 800~400VAC		
PV Port (Optional)	AC Rated Input Power	1000kW		
	Rated Voltage	400V, 50/60Hz		
Load Port	AC Rated Output Power	1000kW		
	Rated Voltage	400V, 50/60Hz		
Basic System Parameters	IP Protection Level	IP54 (Battery Compartment)		
	Corrosion-proof Grade	C4H		
	Cooling Type	Intelligent Liquid Cooling (Automatic Refilling Function)		
	Operation Temp. Range	-25°C~55°C		
	Working Altitude	≤2000m (>2000m Derating)		
	Communication Interface	CAN, RS485, Ethernet		
	Dimension(W*D*H)	6058*2438*2896mm		
	Fire Satey Configuration	Aerosol Fire Protection, Smoke/Temperature Detection, Explosion-proof Ventilation		
	Weight	30t	27.5t	25t

Turtle CL2.5 Series



Off-Grid Version

Designed for standalone power supply in remote or weak-grid areas, this version integrates BESS, PCS, transformer, liquid cooling and optional PV/diesel generator interfaces to build a stable off-grid power system.

◆ Key Highlights

- **Standalone power supply**

Delivers stable AC power in off-grid or weak-grid environments.

- **Lower diesel dependency**

Helps reduce generator runtime, fuel consumption and operating costs.

- **Outdoor-ready design**

IP54 protection, C4H anti-corrosion rating and -25°C to 55°C operating range.

- **PV and diesel generator ready**

Supports PV access and diesel generator connection for hybrid microgrid applications.

- **Stable voltage and frequency**

Provides reliable power output for off-grid loads.

◆ Product Parameters

	Model	Turtle CL2.5	Turtle CL2.089	Turtle CL1.67
DC Side Parameters	Battery Type	LFP 314Ah	LFP 314Ah	LFP 314Ah
	Configuration	2.507MWh/6P416S	2.089MWh/5P416S	1.67MWh/4P416S
	DC Voltage Range	1164.8V ~ 1497.6V	1164.8V ~ 1497.6V	1164.8V ~ 1497.6V
PCS Parameters	Quantity	6	5	4
	Power	1500kW	1250kW	1000kW
Diesel Generator Port (Optional)	AC Rated Input Power	1000kW		
	Rated Voltage	400V, 50/60Hz		
Transformer	Power & Voltage	1250kVA / 800~400VAC		
PV Port (Optional)	AC Rated Input Power	1000kW		
	Rated Voltage	400V, 50/60Hz		
Load Port	AC Rated Output Power	1000kW		
	Rated Voltage	400V, 50/60Hz		
Basic System Parameters	IP Protection Level	IP54 (Battery Compartment)		
	Corrosion-proof Grade	C4H		
	Cooling Type	Intelligent Liquid Cooling (Automatic Refilling Function)		
	Operation Temp. Range	-25°C~55°C		
	Working Altitude	≤2000m (>2000m Derating)		
	Communication Interface	CAN, RS485, Ethernet		
	Dimension(W*D*H)	6058*2438*2896mm		
	Fire Satey Configuration	Aerosol Fire Protection, Smoke/Temperature Detection, Explosion-proof Ventilation		
	Weight	30t	27.5t	25t



Turtle CL2.5 Series



Grid-Tied Version

Designed for C&I grid-connected energy storage and PV-plus-storage projects, this version supports multiple AC voltage platforms and is suitable for peak shaving, demand management, PV self-consumption and grid support.

◆ Key Highlights

- **Multi-voltage compatibility**

Supports **400V / 690V / 800V** grid connection.

- **Weak-grid adaptability**

Supports stable operation under weak-grid conditions.

- **Streamlined configuration**

Simplified AC-side design for standard C&I grid-tied projects.

- **PV-plus-storage ready**

Improves PV self-consumption and project returns.

- **SVG function**

Provides reactive power support and improves power quality.

◆ Product Parameters

	Model	Turtle CL2.5	Turtle CL2.089	Turtle CL1.67
DC Side Parameters	Battery Type	LFP 314Ah	LFP 314Ah	LFP 314Ah
	Configuration	2.507MWh/6P416S	2.089MWh/5P416S	1.67MWh/4P416S
	DC Voltage Range	1164.8V ~ 1497.6V	1164.8V ~ 1497.6V	1164.8V ~ 1497.6V
PCS Parameters	Quantity	6	5	4
	Voltage	400/690/800V	400/690/800V	400/690/800V
	Power	750/1290/1500kW	625/1075/1250kW	500/860/1000kW
Grid Port	AC Rated Input Power	1000kW		
	Rated Voltage	400V/690V/800V, 50/60Hz		
PV Port	AC Rated Input Power	1000kW		
	Rated Voltage	Determined by PCS Voltage		
Load Port	AC Rated Output Power	750/1000kW	625/1000kW	500/860/1000kW
	Rated Voltage	Determined by PCS Voltage		
Basic System Parameters	IP Protection Level	IP54 (Battery Compartment)		
	Corrosion-proof Grade	C4H		
	Cooling Type	Intelligent Liquid Cooling (Automatic Refilling Function)		
	Operation Temp. Range	-25°C~55°C		
	Working Altitude	≤2000m (>2000m Derating)		
	Communication Interface	CAN, RS485, Ethernet		
	Dimension(W*D*H)	6058*2438*2896mm		
	Fire Satey Configuration	Aerosol Fire Protection, Smoke/Temperature Detection, Explosion-proof Ventilation		
	Weight	26.5t	24t	21.5t

