FLEX-233L05/M5P80

Product Specification

Product model	FLEX-233L05/M5P80
Product name	Liquid Cooling Energy Storage System
Project number	
Document version	V1.0
Controlled File number	
Date	2025.08.03

Approve	**Check**	**Design**

Version records

Version	**Updating**	**Date**	**Revision/Formulation**
V1.0	New Release	2025.08.03	First edition

Catalogue

1. Application Scope

This specification sheet is only applicable to the FLEX-233L05/M5P80 products provided by our company. For the left and right compartment liquid cooling integrated system.

This energy storage integrated system only supports grid-connected operating mode and is equipped with anti-islanding protection function, effectively preventing islanding effects and ensuring the safe operation of the grid and equipment.

2. Summary

The liquid-cooled outdoor energy storage cabinet integrates modules such as liquid-cooled battery packs, PCS, control box, fire protection system, distribution system, lighting system, thermal management system, and dynamic environmental monitoring. It features high adaptability to environments, short construction periods, support for parallel expansion, and ease of installation and transportation. It can be used in scenarios such as load leveling, distribution expansion, and demand response, making it widely applicable in settings like shopping malls, residential communities, schools, factories, and farms.

3. Functional characteristic

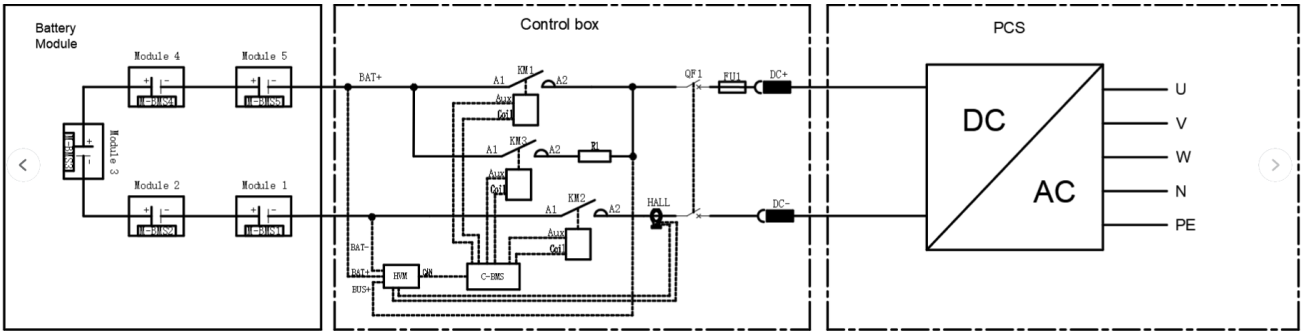
- Standardized design, modular assembly, simple and quick installation, easy maintenance;
- Small footprint, short construction period, strong environmental adaptability;
- Efficient liquid cooling and temperature control design improves the consistency of battery cell operating temperature and extends the service life of the system;
- Multi-stage ladder protection mechanism with joint hardware and software to ensure system security;
- Adopting efficient balanced design to increase the depth of system usage;
- Comprehensive environmental monitoring system to improve system security;
- With the cloud platform can realize the whole life cycle of data and event records, so as to be traceable and can be queried;
- Supports EMS dispatching and can participate in the formation of an energy internet;
- With remote real-time monitoring interface, it can monitor the system running status anytime and anywhere through the web page or mobile APP;
- Supports system self-test and protection with remote upgrade capability;
- Optional intelligent cloud platform system supports cloud sharing, power station management, big data analysis and report statistics;

4. Implement standards, laws and regulations

EN IEC 61000:2019
IEC 61000:2018
EN IEC 61000:2019
IEC 62477:2012
IEC 62619:2022
IEC 62321:2013

5. Technical specification

5.1Electrical schematic diagram

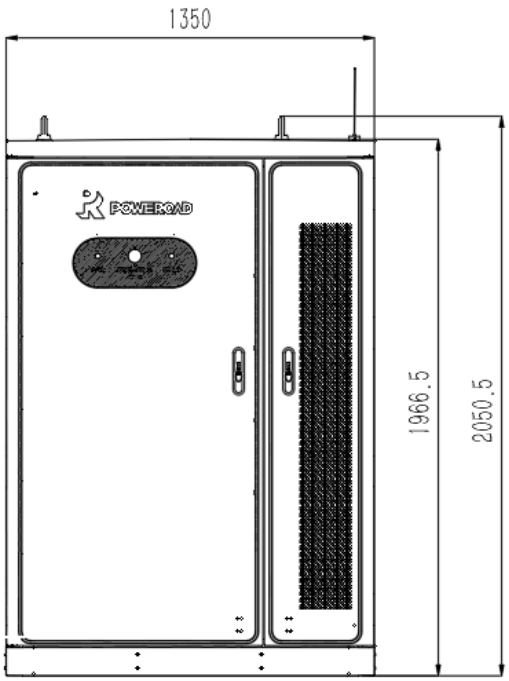


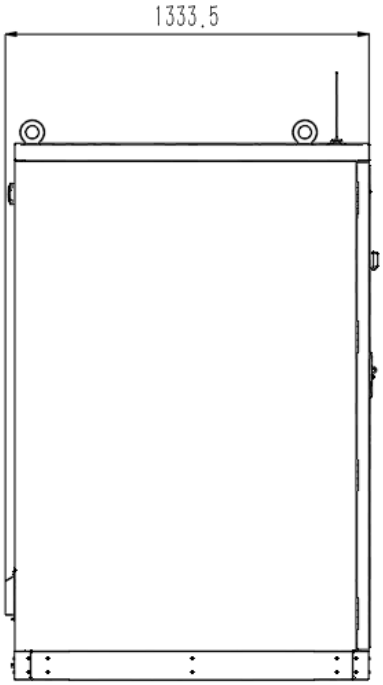
5.2 Specification parameter

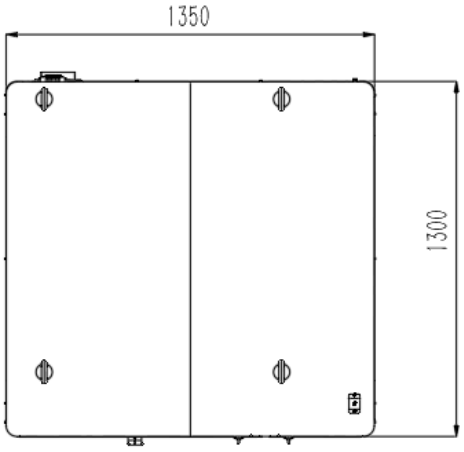
Category	Parameter	Parameter specification
AC side	Rated power	80kW
	Maximum power	88kW
	Rated voltage	AC400V
	Rated current	115A
	Maximum current	130A
	Wiring method	3P+N+PE
DC side	Rated capacity	233kWh
	Rated voltage	832V
	Maximum charging voltage	936V
	Minimum discharging voltage	728V
	Rated charging and discharging current	96.1A
	Maximum charging and discharging current	120.9A
Other	Operation temperature	-30～50℃
	Storage temperature	-30～60℃
	Communication method	Ethernet,RS485
	Relative humidity	5%~95%　No condensation
	Altitude(m)	<2000m
	Cooling method	Liquid cooling

Category	Parameter	Parameter specification
	IP protection level	IP55
	Weight	2.65t
	Product dimension	L: 1350±3mm
		W: 1300±3mm
		H: 2050±3mm (Including lifting rings) H :1965±3mm (Excluding lifting rings)

5.3 Installation dimension







5.4 Interface description

	Description	Recommended cable diameter	Remarks
DC power wire	Battery output DC+	70mm²	
	Battery output DC-	70mm²	
AC380V AC power input MCCB QF1	L1	50mm²	
	L2	50mm²	
	L3	50mm²	
	N	50mm²	
	PE	25mm²	
Communication wire method	Ethernet communication	Shielded straight-through network cable	
PE	Ground wire	25mm²	

6. Product appearance

7. Precaution

- This product involves high voltage, and personnel performing various high voltage operations and installing equipment must have corresponding electrician operation qualification certificates;
- Before powering on, please confirm that the device is properly grounded and check if the wiring connections are correct;
- Special tools should be used when performing high voltage and alternating current operations;
- When the device needs to be moved or rewired, the power should be disconnected and the corresponding operation should be carried out after the device is completely powered off;
- When storing for a long time, it is recommended that the SOC of the energy storage system should not exceed 40% and be recharged every 3 months;

8. Statement

Please strictly follow the parameters and requirements provided in the product specification sheet when using the product. If the product is damaged or accidents are caused due to non-compliance or unauthorized modification, our company will not be held responsible.