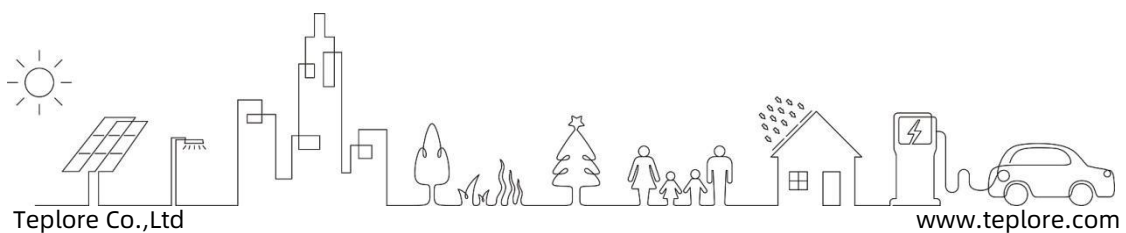


Tensorpack T Hybrid System Specification

R1.0



Abbreviation and Definition

Abbreviation	Definition
BMU	Battery Monitoring Unit
SMU	System Management Unit
BMS	Battery Management System
TMS	Thermal Management System
FFS	Fire Fighting System
ESS	Energy Storage System

1 Product Introduction

1.1 Background

Tensorpack M is a fully integrated microgrid solution featuring a 120kWh LFP battery and hybrid inverter. This all-in-one system seamlessly transitions between grid-tied and off-grid modes in under 20ms, ensuring uninterrupted power supply. Ideal for C&I scenarios requiring robust, self-sustaining energy resilience.

1.2 Scope of Use

This document aims to describe in detail the system composition, product and specifications of the battery system within the Tensorpack M ESS , providing clear guidance and reference for engineers, users, and other relevant personnel.

2 System Topology

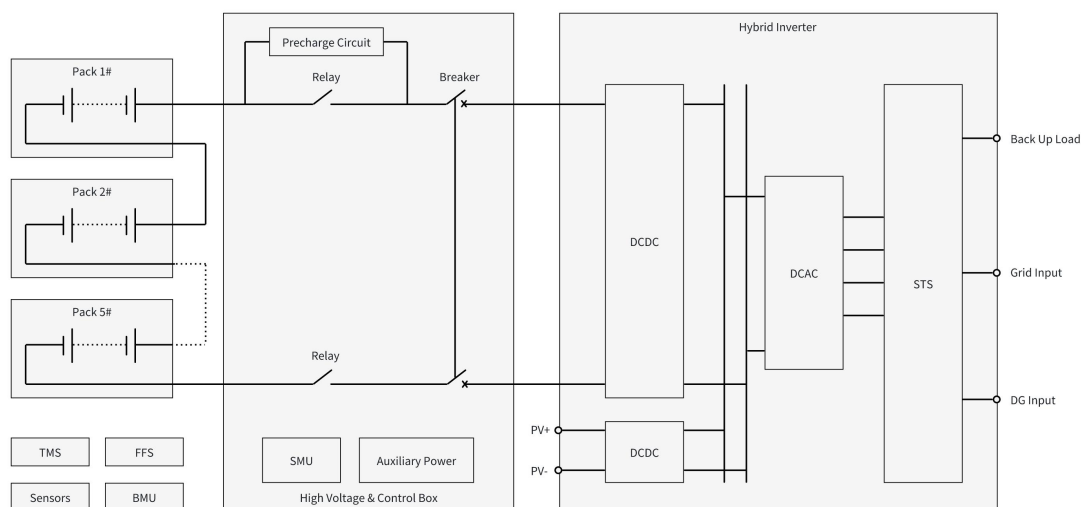


Figure 2.3 TB265 Battery System Topology

3 System Specification

Tensorpack M Hybrid System	
Model Type	50kW/120kWh
Grid-Side AC Parameters	
Rated Output Power	50kW
Max Output Apparent Power	55kVA
Rated AC Voltage	230/400V
Connection Type	3L/N/PE
Frequency	50/60Hz
PV Input	
Max Input Power	75kW
Start Up Voltage	135V
Max DC Input Voltage	850V
Rated DC Input Voltage	620V

MPPT Voltage Range	200-850V	
No. of MPP Trackers	4	
No. of DC Inputs per MPPT	2	
Max. Input Current	(40x4) A	
Max. Short-circuit Current	(50x4) A	
Back Up Side		
Rated Output Power	50kW	
Max. Output Apparent Power	55kVA	
Max. Output Current	83A	
On/Off-grid Switching Time	<20ms	
Rated Output Voltage	3/N/PE, 220/380V; 230/400V; 240/415V	
Rated Output Frequency	50/60	
Peak Output Apparent Power	60,10s	
Voltage Harmonic Distortion	<3% @Linear load	
Generator Side		
Rated Output Power	50kW	
Max. Output Apparent Power	55kVA	
Max. Output Current	83A	
Battery Parameters		
Model Numebr	TB217	TB241
Rated Capacity	217kWh	241kWh
Rated Voltage	691.2V	768V
Voltage Range	604.8V ~ 777.6V	672V ~ 864V

Battery Type	LFP314Ah		
Configuration	1P216S	1P240S	
Pack Amount	9	10	
DC C Rate	Maximum 0.5C		
Mechanical Parameters			
IP Rating	IP55		
Corrosion Proof	C3 (C4 Optional)		
Dimension(WxDxH)	Without Inverter	1300x1300x2200	
	With Inverter	1500x1300x2200	
Weight	Without Inverter	2380kg	2550kg
	With Inverter	2460kg	2630kg
System Parameters			
Operating Temperature Range	-30℃ ~ + 55℃		
Storage Temperature Range	-30℃ ~ + 60℃		
Humidity	0% ~ 100% (Non Condensing)		
Altitude	≤2000m		
Cooling Method	Air Cooling		

4 System Appearance

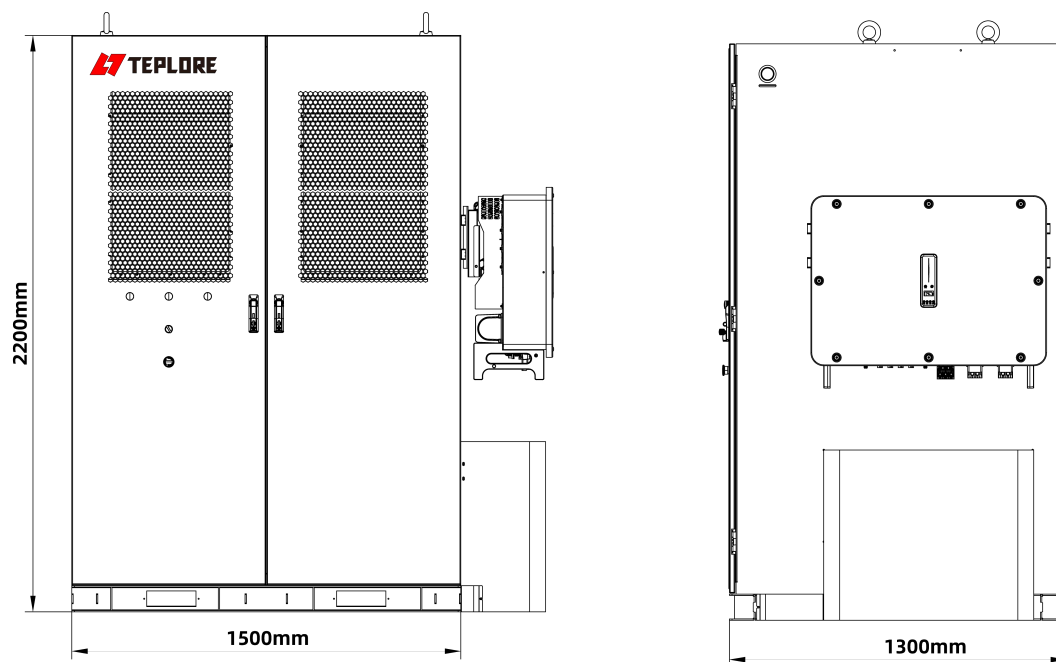


Figure 4.1 System Appearance