

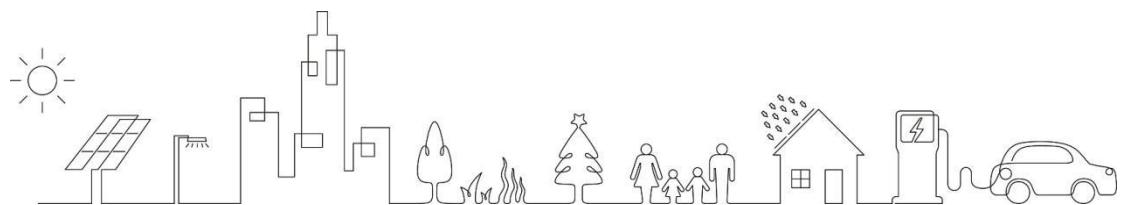
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# **Tensorpack M**

## **50kW/120kWh- Hybrid System**

### **Specification**

**R1.1**



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## Abbreviations

<b>BMU</b>	Battery Monitoring Unit
<b>SMU</b>	System Management Unit
<b>BMS</b>	Battery Management System
<b>TMS</b>	Thermal Management System
<b>FFS</b>	Fire Fighting System
<b>ESS</b>	Energy Storage System

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# 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

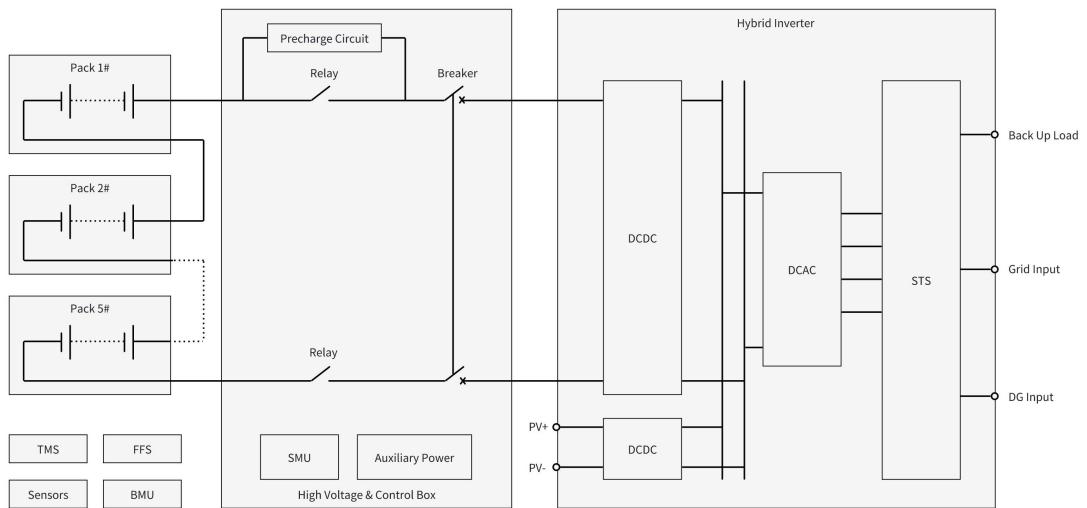


Figure 2.1 TB265 Battery System Topology

### 3 System Specification

<b>Tensorpack M Hybrid System</b>	
Model Type	50kW/120kWh
<b>Grid-Side AC Parameters</b>	
Rated Output Power	50kW
Max Output Apparent Power	55kVA
Rated AC Voltage	230/400V
Connection Type	3L/N/PE
Frequency	50/60Hz
<b>PV Input</b>	
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
<b>Back Up Side</b>	
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
<b>Generator Side</b>	
Rated Output Power	50kW
Max. Output Apparent Power	55kVA
Max. Output Current	83A
<b>Battery Parameters</b>	
Rated Capacity	120kWh
Rated Voltage	384V
Voltage Range	336V-432V
Battery Type	LFP314Ah
Configuration	1P120S
Pack Amount	5Pack
C Rate	0.5C
<b>Mechanical Parameters</b>	
IP Rating	IP55
Corrosion Proof	C3 (C4 Optional)

Dimension(WxDxH)	Without Inverter	766mmx1300mmx2140mm
	With Inverter	1100mmx1300mmx2140mm
Weight	Without Inverter	1.3T
	With Inverter	1.4T
<b>System Parameters</b>		
Operating Temperature Range	-30°C ~ + 55°C	
Storage Temperature Range	-30°C ~ + 60°C	
Humidity	0% ~ 100% (Non Condensing)	
Altitude	≤2000m	
Cooling Method	Air Cooling	

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## 4 System Appearance

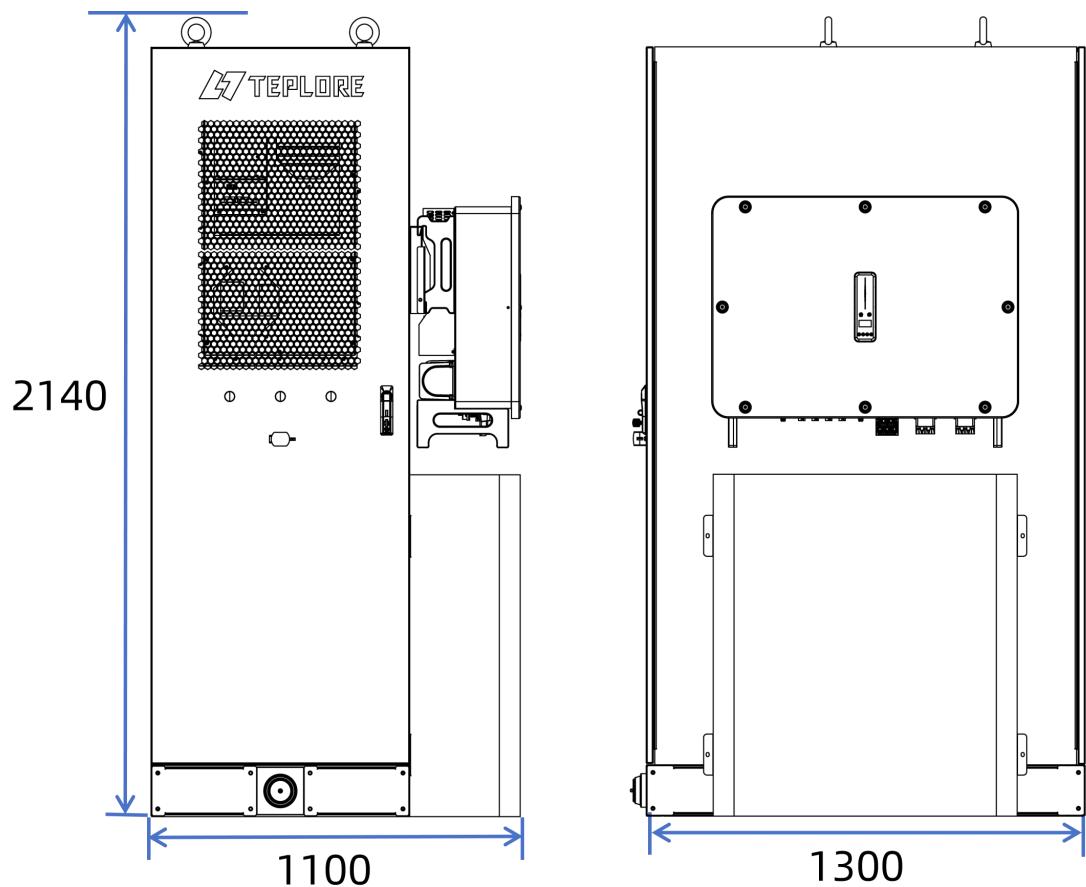


Figure 4.1 System Appearance