TECLOMAN

Vega

MW-Level 20ft Liquid-Cooled Commercial & Industrial Energy Storage System

TESS-1000-2089

Product Overview

The MW-Level 20ft liquid-cooled commercial and industrial energy storage system is designed for both domestic and international C&I energy storage applications. It features an integrated design within a standard 20ft container, equipped with a high-level fire protection system and intelligent thermal management.

The system is widely applicable in various scenarios such as peak shaving and valley filling, backup power supply, smart microgrids, and renewable energy integration at the distribution level.

- Integrated design: Compact and easy for installation and transportation, with high safety and protection levels.
- Independent battery and electrical compartments: Enhanced fire and electrical protection.
- Reliable integration of intelligent cooling and fire suppression: Greatly improves system safety and reliability.
- Modular scalability: Flexible configuration suitable for different applications.
- High-efficiency liquid cooling: Battery temperature difference < 5 °C.
- Smart O&M: Cloud-based lifecycle management with real-time monitoring and intelligent diagnostics.

Model	TESS-1000-2089
AC	
Rated Power*	1000kW
Rated Voltage	400V
Rated Current	1444A
AC Wiring	3L/N/PE
Voltage Range	400Vac (-15% ~ +10%)
Rated Frequency	50Hz/60Hz
THDI	＜3%(@Rated Power)
Power Factor	＞0.99
Power Factor Range	±1
Overload Capacity	110% overload (10 min), 120% overload (1 min)
DC (Battery)	
Cell Type	LFP 3.2V/314Ah
Configuration	260S8P
Battery Capacity	2089kWh
Charging and Discharging rate	⩽0.5P
Rated Voltage of Battery Rack	832V
Voltage Range	728 ~ 949V
General	
Noise Level	＜75dB (A) @1m
Protection level	IP54
Anti-corrosion Degree	C3
Operating Temperature	-25°C ~ +55°C
ire Protection	Aerosol
Cooling Method	Liquid-cooled air conditioning+
Relative Humidity	0~95%(non-condensing)
Altitude	<2000m(derated above 2000m)
Dimensions (W×D×H))	6058×2438×2896 mm
Weight	27000kg

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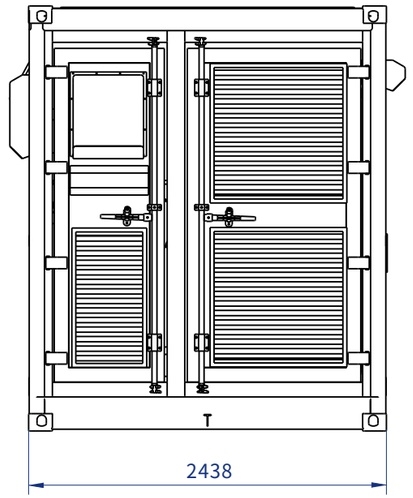
Model	TESS-1000-2089
General	
Certification	EN 62477-1、EN 61000-6-4、EN 61000-6-2、EN50549-1、C10/11、EN50549-2、Rfg:2016 NC Rfg:2018、PTPiREE: 2021、EU 2023/1542 Article 6+10+12+14、UL1973、UL9540A:2025、ST/SG/AC.10/11/Rev.8/Section 38.3
Communication	
Display	Toucg Screen
Communication Interfaces	RS485、LAN
Communication Protocol	Modbus

*Note: The maximum battery output power shall not exceed 0.5P.
The rated power of a single PCS can be selected from 630 kW, 500 kW, 400 kW, or 250 kW.

Product Dimensions



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