

Vega

The MW-level liquid-cooled commercial and industrial photovoltaic energy storage system

TESS-1000-2096



Product Overview

The MW-level liquid-cooled commercial and industrial photovoltaic energy storage system (315Ah) is designed for domestic and international commercial energy storage applications. It supports AC400V grid connection, reserves charging pile interface, features integrated standard 20-foot container design, high safety level fire protection, and intelligent temperature control systems. It is suitable for various PV-storage-charging, substation expansion, and local microgrid applications.



Integrated design, high protection level, convenient installation and transportation.



The reliable integration of intelligent temperature control and fire management improves the fire safety protection of the system.



Supporting multiple parallel expansion devices for use.



Supports 400V power grid access.



Independent battery and electrical space design enhances the level of protection.



Meet the new energy consumption, micro grid, peak regulation and other multiple application scenarios.



The whole container is certified by Classification Society to meet the overall transportation of the system.



Charging pile interface reserved design.

Model	TESS-1000-2096
AC	
Maximum Power	1100kW
Rated Power	1000kW
Rated Voltage	400V
Rated Current	1444A
Voltage Range	400VAC (-15%~+10%)
Rated Frequency	50Hz/60Hz
THDI (Current Total Harmonic Distortion)	<3%
Power Factor	0.9 leading ~ 0.9 lagging
AC Configuration	3/N/PE
DC	
Battery Rated Voltage	832V
Battery Voltage Range	728~949VDC
Battery Capacity	2096kwh
Maximum Charging Power	1100kW
Maximum Discharging Power	1100kW
Maximum Charging Current	1587A
Maximum Discharging Current	1587A
Basic Parameters	
Noise Level	<75dB(A) @1m
Protection Level	IP54
Anti-corrosion Level	C3
Operating Temperature	-25°C to +55°C
Protection Functions	Over/under voltage, over current, over temperature/low temperature, SOC too high/low, low insulation resistance, short circuit protection, etc.
Fire Protection	Aerosol
Cooling Method	Liquid-cooled air conditioning + forced air cooling
Relative Humidity	0~95% (non-condensing)
Altitude	4000m (derated above 2000m)
Dimensions (WxDxH)	6058x2438x2896mm
Weight	27000kg
Communication	
Display	Touch Screen
Communication Interfaces	RS485, CAN, LAN



 **Product Certification**
PCS Certification:

CE: (LVD:IEC62477-1、EMC:EN 61000-6-4、EN 61000-6-2)、CGC (GB/T 34120-2017 GB/T 34133-2017)、Grid connection: (European Union:EN50549-1/10)、Grid connection: (Belgium:C10/11)、Grid connection: (EU medium voltage grid connection: EN50549-2)、Grid connection: (Poland's grid connection:Rfg:2016 NC Rfg:2018 PTPiREE:2021)、EMC: (South Africa EMC:IEC 61000-2-2 and Crisper 11)、Grid connection: (South Africa:NRS 097-2-1)

Module Certification:

CE: (EU 2023/1542 Article 6+10+12+14)、UL: (UL1973)、UL: (UL9540A:2025)、UN38.3: (ST/SG/AC.10/11/Rev.8/Section 38.3)

Battery Certification:

CE: (EMC:EN 61000-6-2、EN 61000-6-4、LVD:IEC 62477-1、EU 2023/1542 Article 6+10+12+14)、CB: (CB:IEC 62619-2022、CB:IEC 63056-2020)、UN38.3: (ST/SG/AC.10/11/Rev.7/Section 38.3)、UL: (UL 1973)、UL: (UL 9540A)

 **Product Dimensions**
