



info@tdgibernavitas.com
Rda. del Aeropuerto
50197 Zaragoza
tdgibernavitas.com

BeEfficient. BeSustainable.

ORION UE-L400



BeEfficient. BeSustainable.

Adaptable energy storage solution
offering scalability, operational reliability,
and quick deployment.

tdgibernavitas.com

ORION UE-L400 Liquid Cooling Energy Storage System (200 kW/406 kWh)

This modular system features a compact structure, flexible configuration, rapid expandability, and supports multiple units in parallel.



Glossary. PCS: Power Conversion System / EMS: Energy Management System / BMS: Battery Management System.

MODEL 200 kW/406 kWh

DC	
Cell type	305 Ah (LFP)
Modular Battery System	50.75 kWh (1P52S)
Battery capacity	406 kWh (1P416S)
Voltage range	1,040V ~ 1,500 Vdc
Discharge range	≤ 0.5 P
Depth of discharge	≥ 95%

AC	
Rated Power	200 kW
Nominal voltage	690 Vac
Total current distortion rate	< 3%
Component	> 0,99
Nominal frequency	50 Hz/60 Hz

GENERAL	
Degree of Protection	IP54
Life cycles	≥ 8,000 (@25°C, 95%DOD, 0,5P EOL ≥ 70%)
Relative humidity	≤ 85 % ROH, non-condensing
Max. working altitude	≤ 3,000 m
Fire safety equipment	AEROSOL
Operating temperature range	-30°C ~ 60°C
Cooling Method	Liquid cooling
Dimensions (W×D×H)	1,400*1,400*2,600 mm
Weight	3,9 t

COMMUNICATIONS	
Interface	RS485/Ethernet
Protocol	MODBUS-RTU/TCP, IEC104, IEC61850

COMPLIANCE	
IEC 62619: 2022, IEC 63056:2020, EN 62477-1:2012+A11+A1+A12, EN IEC 61000-6-2:2019, EN IEC 61000-6-4:2019, IEC 61000-6-2:2016, IEC 61000-6-4:2018, EN 50549-1:2019	

This product is a comprehensive modular energy storage system.

ESS MODULAR

Each battery RACK has a PCS:

- Problems with one RACK do not affect the other racks.
- Each RACK can be individually controlled.
- Feasible to add new RACKs after commissioning.

Multiple energy storage cabinets are connected in parallel, with parallel capacity expansion and the voltage remains constant.



Product Features

Cloud platform automatic strategy, Supports remote preset of new strategies for automated management.

Automatic calculation of comprehensive benefits including electricity fee income, carbon income, and other benefits.

Ultra-long cycle life, intelligent thermal management system, high energy density, and small footprint.

High voltage system adaptability, capable of stable operation in poor power quality environments.

Adaptability to multiple scenarios, such as peak shaving and valley filling, demand regulation, virtual capacity expansion, and PV consumption.

Dynamic scenario adaptation, adjusting storage charge and discharge strategies based on seasonal characteristics, demand changes, and electricity price fluctuations.

Bidirectional AC/DC adjustment function, capable of driving multiple converters for centralized control management.