



VoltStorage VDIUM C50

The durable and clean storage solution to optimize your selfconsumption

The VoltStorage VDIUM C50, based on eco-friendly redox flow technology, has been specifically designed for self-consumption optimization. With a charge and discharge duration of 5 h – 10 h it is suitable for industrial, commercial and agricultural applications. The storage system with a usable discharge energy of 50 kWh and a system discharge power of 9 kW can be expanded as required and thus adapted to your respective generation and consumption environment. Thanks to the integrated battery inverter, the AC-coupled system solution is compatible with all power generation systems and can therefore also be easily integrated into an already existing infrastructure. With a lifespan of over 10,000 charging cycles and a service life of more than 20 years, the system is one of the longest-lasting storage systems currently available on the market.



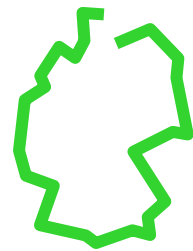
VRF technology

The system is based on environmentally friendly, durable and safe vanadium redox flow storage technology.



Complete AC system

The VoltStorage Commercial products come standard with an integrated battery inverter and energy management system.



Made in Germany

The development and production of the VoltStorage Commercial products take place in Munich – quality Made in Germany.

Technical data

Performance

Rated discharge energy DC ¹	52.5 kWh
Rated discharge energy AC excl. / incl. auxiliaries AC	50.0 kWh / 47.0 kWh
Max. AC power charge	10.0 kW
Max. charging efficiency	85 %
Charge duration	6.0 h (0 – 80 % SoC) 9.0 h (0 – 100 % SoC)
Max. AC power discharge ²	9.0 kW
Discharge duration (100 – 0 % SoC)	6.0 h at max. power 10.0 h at 5 kW
Cascadability	Up to 10 units
Auxiliary standby consumption	40 W
Designed product lifetime	20 years / 10,000 cycles at full discharge
Warranty	5 years on system hardware 20 years on electrolyte capacity ³

Dimensions and Interfaces

Dimensions (L x W x H)	3,280 x 2,152 x 1,985 mm
Weight (dry / wet)	2.0 t / 6.5 t
Mounting	Level concrete foundation, max. slope 0.5° Fixed at 4 points to the foundation
AC connection	400 V _{AC} 3-Phases, 50 Hz
Internet connection	Ethernet
Communication and EMS	Modbus TCP/RTU, VoltStorage EMS
Reaction time AC	< 1 s
System monitoring	VoltStorage EMS

Compliance and Safety

Compliance	CE
Secondary containment	Integrated
Fire suppression system	Not required
Stack voltage	48 V

¹ At 5 kW rated continuous discharge power at 30 °C electrolyte temperature
² For up to 90 min at SoC >50%
³ Capacity loss of electrolyte <0.3% per year

Disclaimer: The data presented in this document is for informational purposes only and shall in no event be regarded as a guarantee of conditions or characteristics. Any warranty for this product shall be specified and governed by the terms of a separate purchase agreement. VoltStorage GmbH reserves the right to make change in these specifications and features shown herein to improve the reliability, function and design of this product, at any time without notice or obligation.

Status as of June 2023

Environmental

Environment	Outdoor
Technology	Vanadium redox flow
Ambient Temperature (operating / standby)	-5 °C to 35 °C average day temperature / -15 °C to 45 °C
Max. altitude	< 2,000 m
Humidity	0 – 90 %
Cooling	Integrated active ventilation
Enclosure rating	IP 54
Noise level	< 60 dB at 1 m

Contact

Do you have any questions, would you like more information or an individual consultation? We are here for you.

Phone

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