

Powering next gen mobility

VERS active
inside



Mild Hybrid System
Product Card

VERS

New standard of efficiency

New advancements in carbon and graphene technologies enabled Energy Recuperation with **99% efficiency** across the Automotive industry. Our systems focus on recovering energy in the process of combustion engine braking — rather than dissipating the kinetic energy into heat, recuperation provides significant fuel savings.



Working principle

Hybrid Assist

VERS Mild Hybrid System recovers energy via a dedicated belt-driven 48 V Motor-Generator. The electrical energy is saved with up to 10 kW of Power, stored in the supercapacitors module and used to support the main engine during vehicle acceleration. The supercapacitors' loading takes only seconds thanks to the ion exchange energy transfer which is a rapid physical process.

VERS

Mild Hybrid System

TCO Optimised

High efficiency delivered at low cost enables VERS Mild Hybrid System to be the most profitable City Bus solution on the market.

High Capacity

Our best-in-class 130 Wh supercapacitor module enables Energy Recovery with up to 10 kW of Power and Hybrid Assist with up to 4 kW Power Boost.

Ultralight

Advanced supercapacitor cells allow to downsize the weight of the System to 58 kg without sacrificing performance and durability.

Longer Lifetime

The System is engineered to allow for 1 million of loading cycles; to guarantee reliability, our supercapacitors pack is protected by a 10-year limited warranty.

Up to 10 kW
Energy Recovery

10 years
Supercap warranty

Start-Stop
Enabled

Rated voltage: 48 V
Maximum Power: 10 kW
Energy Capacity: 130 Wh



ISO 9001:2015
Certification



CE Certification



VERS

Power when you need it

Winter conditions and low battery levels can affect fleet reliability in Northern climates. VERS Mild Hybrid System provides additional boost of **up to 45 Nm of torque** on uphill routes. Each System is also equipped with functions dedicated towards battery problems: **Start Assist and Battery Protection**. Firstly, the System supports the electric installation with up to 150 A increasing reliability in all conditions. Secondly, it protects the onboard battery from high loading currents, lengthening its life expectancy by up to 400% (as tested with City Bus Customers).



Monitoring savings



Each VERS Mild Hybrid System is equipped with a custom Monitoring unit, measuring performance and sending the data via Wifi. Our Customers receive regular updates on their savings in **VERS Monthly Reports** delivered directly to their email.

While the results vary depending on the route profile and fuel prices, the Return on Investment in the Total Cost of Ownership is estimated to **3-5 years** of a City Bus operation.

Customer Contact

We are delighted to know your views. If you need additional information or would like to test VERS Systems onboard your buses, please feel free to contact our Customer Team.

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