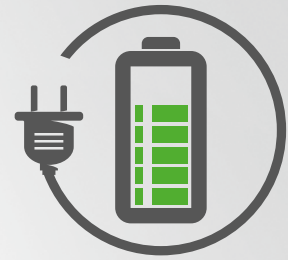




Making vehicles special

Sustainable Rescue Services: Electric Ambulance Mercedes-Benz Sprinter Box Conversion 5.5 T.



Ideal Conditions for E-Mobility in the Rescue Services.



E-mobility is becoming established – because it is efficient, powerful and zero emission. It's high time that sustainable drive technology also became established in special and emergency vehicle construction. With our electric ambulance, we are showing that the electric drive system is also a viable alternative for emergency vehicles with a high weight of up to 5.5 t. In Germany, our electric ambulance has already been tested and put into use in a standard ambulance service context. Our experience has shown: it pays off when you're open to new things!

High-Performance Technology, on which You Can Rely.

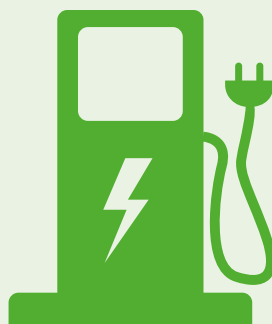
High Performance.

The powerful 200 kW drive system with a torque of 1150 Nm enables a top speed of 120 km/h and impresses with high acceleration values.

Long Range.

The electric ambulance manages around 200 km under real conditions with a single battery charge – and this with a weight of 5.5 t. With interim charges at hospitals and charging stations, the electric ambulance can be utilised all day long in the city.

This noteworthy performance is achieved thanks to our use of highly efficient high-voltage lithium battery technology – in conjunction with our light weight body construction.



22 kW	50 kW
3.5 h	1.5 h

Short Charging Times.

With charging times of 3.5 hours at 22 kW – or as little as 1.5 hours in 50 kW mode, the electric ambulance is back on the road in no time. The charging times can be put to exceptional use for preparation and follow-up after deployments: Even a charging time of just 20 to 30 minutes at 22 kW at the ambulance site provides a significant range extension of around 30 kilometres. For your convenience, when charging in 22 kW mode you can use the standard 400 V CEE connector with 32 A fuse provided.

High Safety Level.

The vehicle remains safe, even in case of damage, as only self-locking, non-flammable battery technology is installed.

Strong Performance, that Pays off.



Optimal efficiency under the bonnet:

The high-performance synchronous motor is integrated into the battery system, which includes intelligent battery management. This monitors, controls and safeguards the supply of power to the entire vehicle.

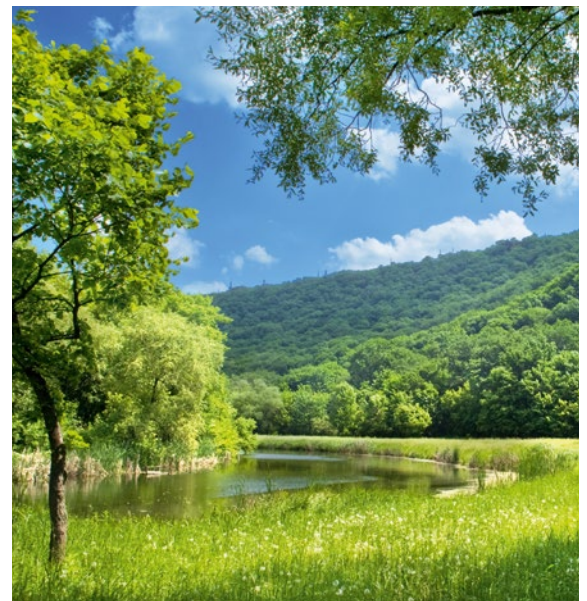


The current power status at a glance:

The cockpit display provides information regarding the vehicle management, including the remaining range, charge status, energy consumption and vehicle status information.

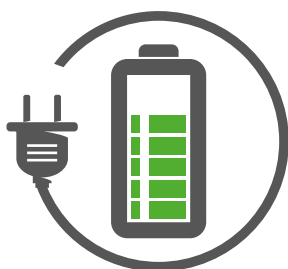
KEY FEATURES	
Power management	Vehicle management system with display monitor
Highly efficient synchronous motor	Approx. 1150 Nm torque 200 kW output
Top speed	120 km/h
Nominal voltage	Approx. 400V
On-board charger	22 kW, optional 50 kW (DC quick-charging)
Heating/Air-con	7/6 kW output
Range	200 km*
Battery output	87 kWh
Perm. total weight	5.5t

*under real conditions, depending on the driving and application profile



Promoting Sustainability.

E-mobility is promoted by the Department for Transport as a key technology for a future-proof and sustainable transport system. Electromobility projects within the emergency services also benefit from this when it comes to the procurement of electric vehicles and the development of charging. There are also many local funding pools. This type of funding makes your new electric vehicle fleet even more affordable.



Utilise Potential, Operate Sustainably.



Custom Equipment.

The WAS lightweight box construction also pays dividends for the E-Ambulance. It not only saves weight and thus drive power, but also offers custom equipment options depending on the main intended application. The power supply to the medical equipment, including the air conditioning technology and ventilation, is also fully covered by the electric motor.

Low Operating Costs.

The E-Ambulance saves both money and time: firstly, electricity is much cheaper than fossil fuels, and secondly there are no maintenance costs or time wasted on oil changes and other servicing required for the safe operation of a combustion engine.



COST OVERVIEW		
	Reference vehicle MB 516	WAS E-Ambulance
Operating costs 7 years/40 Tkm p. a.	280,000 km	280,000 km
Energy costs	€ 42,952*	€ 29,120**
Service costs	€ 14,000	€ 8,400
Total operating costs	€ 56,952	€ 37,520
Operating cost advantage		€ 19,432 = 34 %

* Fuel cost of € 1.18/l and a consumption of 13l
** Electricity costs at € 0.26/kWh

