e.CHARGING

kiepe.

Energy Storage Inverter ESU

EFFICIENT CHARGE MANAGEMENT FOR BATTERY POWERED VEHICLES AND TRAINS UP TO 1,000 VOLTS

KIEPE' Energy Storage Converter (ESU) controls the charging and discharging of traction batteries for electric buses, rail vehicles and specialty vehicles, safely and efficiently and is easy to install.

The ESU can be used in a wide range of applications including buses, rail vehicles, maintenance vehicles for rail operations or electric vehicles used in mining.

Key Benefits

- **Versatile charging:** Controls the charging and discharging of batteries and serves as a “bridge” for the external battery.
- **High voltage regulation:** Can regulate up to 1,000 volts and is suitable for heavy-duty vehicle applications.
- **Efficient solution:** a ready-to-use solution in the KIEPE product portfolio, with minimal set-up costs: plug-and-play design.
- **Safety:** meets the highest of safety standards and provides reliable operation in demanding environments.

Our USPs

- High efficiency in energy management: Power ratings of 196 kW (ESU101) and 154 kW (ESU102 / ESU103) at a battery voltage of 700 V
- CAN bus integration for improved control
- High-voltage capability (up to 1,000 volts)
- Plug-and-play integration

Parameter	ESU101	ESU102 (vehicles) ESU103 (trains)
Cooling	Air cooling 200 l/s	Water cooling 30°C flow temperature, 10 l/min
Performance	196 kW / 700 V battery voltage	154 kW / 700 V battery voltage
Weight	200 kg	55 kg
Dimensions	1300 x 770 x 370 mm 51,2 x 30,3 x 14,6 inch	580 x 520 x 285 mm 22,8 x 20,5 x 11,2 inch
Structure in ESU	2 chargers	1 charger
Current consumption at 24 V	< 34 A	< 3 A
Noise emissions	Sound pressure level Lpa = 63 dB	-

ESU101 (vehicles) air-cooled variant

ESU102 (vehicles) / 103 (trains) water-cooled variant