



MEETING TODAY'S ELECTRIC VEHICLE  
BREAKDOWN DEMANDS

FULLY MODULAR DESIGN TO FIT IN  
ANY ROAD SERVICE VEHICLE

BUILT TO SERVICE TODAY'S MODERN  
ELECTRIC VEHICLES



**CLS**  
**MOBILE ELECTRIC  
VEHICLE CHARGER (MEVSE)**

## Key Components

- Delivery 12 kilometres of range in under 15 minutes
- LiFePO4 battery pack
- Ability to charge LiFePO4 battery packs in service vehicle
- Inverter system – rated to 8kW capacity
- EVSE delivery and BEV charge control system
- Built in safety features
- Operational in a wide temperature range -20C to + 50C

## Modular systems made up of 3 cassettes (boxes) for easily installation and total flexibility

- Two of the cassettes house 8 of the Lithium cells in each, weighing 44kg per cassette
- One additional cassette has the control systems (BMS), EVSE system, switching controls, chargers for the HV pack etc. and delivery cable outlet ports. Estimate weight at 33kg for the control system cassette

## Total system footprint – 440H X 485W X 1370L – This can be adjusted to various configurations as all cabling can be extended if needed

- Two lithium cell cassettes with carry handles and lock down hooks – 370mm high X 345mm wide X 425mm long each cassette
- Control cassette (one off) being 440mm high X 482mm wide, X 520mm long

- The system will deliver an output to the BEV of **16 amps through to 32 amps** – to suit all popular EV's including Renault Zoe, Tesla and BMW i3.
- The MEVSE is recharged automatically as the rescue vehicle is driving between tasks. The power for this recharge comes directly from the rescue vehicle alternator and battery system. The PSU optimum output current is 80A.
- The high voltage LiFePO4 24 volt battery packs can be charged from an external mains connected Power Supply Unit (PSU). Consult CLS for further instructions.
- Inside the MEVSE are two Lithium Charge Profile DC to DC converters
- An on-board Battery Management System (BMS) will monitor each battery cell and through the master BMS controller, these cells will be either charged or discharged to maintain a consistent cell voltage.
- As the external power supply is a PSU (not a charger), there is no operational effect in regard to the start-up phase. The charging of the capacitors inside the DC/DC converters is very fast, with a number of internal safety checks conducted by the two DC/DC chargers prior to delivering an output voltage or current. The integrity checks cover off all the connections to the two 24 volt battery packs, SOC and SOH and temperature of the two battery packs as well. All done with the Lithium chemistry profiles.



**Australia**  
2908/63 Whiteman Street  
Southbank, Victoria, 3006  
1300 809 840 (within Australia)  
[chloe.davies@clublogisticsservices.com](mailto:chloe.davies@clublogisticsservices.com)

**The Netherlands**  
Fahrenheitbaan 4  
3439MD, Nieuwegein  
+31 30 2323 000  
[ruud.barnas@clublogisticsservices.com](mailto:ruud.barnas@clublogisticsservices.com)