

CASE STUDY: ULEMCo FUEL CELL RANGE EXTENDED ELECTRIC AMBULANCE USES ENOVATION HMI DISPLAY



LOCATION

Liverpool, UK

BUSINESS SECTOR

Hydrogen conversions

EQUIPMENT

Commercial Vehicles

This world-first Ambulance incorporates zero-carbon hydrogen to provide energy through a fuel cell electric drivetrain. Giving up to a 300-mile range capability, it's ready to go at any time whilst offering maximum operational capacity. The Ambulance crew have vital engine information at their fingertips thanks to the Enovation PV500 display, fully configured with PowerVision™ Software.

CHALLENGES FACED

- Ambulance operators need an accurate reading of hydrogen and battery levels to operate efficiently and safely.
- ULEMCo needed a bespoke HMI solution interfacing with proprietary sensors and CAN Bus information, without the challenges of complex design and programming software.

SOLUTIONS PROVIDED

- The PV500 display from Enovation gives the Ambulance Operator complete visibility of levels within the Hydrogen fuel tank and battery level, even in direct sunlight.
- The PowerVision software gives huge programming capability and flexibility with its drag-n-drop interface, allowing rapid development of the HMI interface.





“ The Powervision software has such flexibility that you’re only really limited by your imagination. It’s so user-friendly that you don’t need to be a graphic designer to create professional, informative displays; it’s the perfect tool for our variety of applications.

The support that we have received from IPU has been brilliant. For any questions we have, or any ideas that we want to create, they have offered quick, helpful advice, often going above and beyond what we would expect. ”

ADAM MCLOUGHLIN,
SENIOR DEVELOPMENT ENGINEER,
ULEMCO

VEHICLE VALUES ON DISPLAY

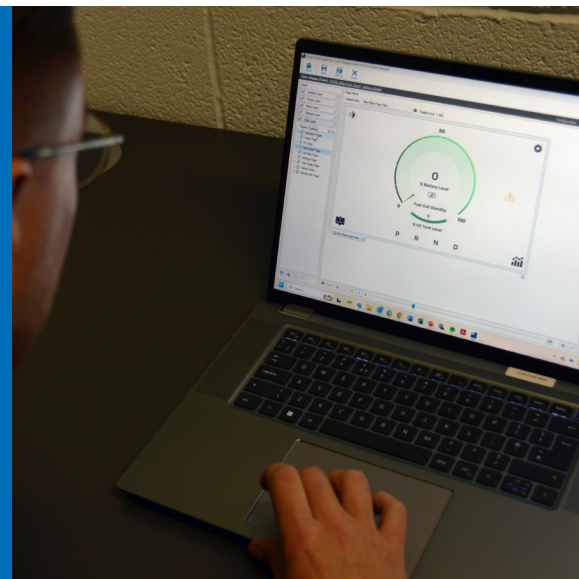
As a vehicle designed for use around Central London, with the potential for congested journeys, it’s imperative the Ambulance Operator has total visibility over the vehicle’s stored energy and consumption parameters. The **PV500 display**, with its 5” full colour edge-to-edge display, integrates vital engine information such as: Hydrogen tank pressure, Hydrogen used (kg), Fuel cell coolant temp, Hydrogen tank level and battery levels. Sitting on the dash above the steering wheel, viewability is not compromised due to the optically-bonded LCD screen, allowing for a clear view even in direct sunlight.

NO PROGRAMMER? NO PROBLEM!

ULEMCo are specialists at Hydrogen conversions and their focus is in investing in carbon-neutral power solutions. They needed a solution that did not require a team of software engineers or applications with a long learning curve.

With support from IPU, ULEMCo quickly discovered the user-friendly nature of the **PowerVision™ Configuration Studio**.

The configuration tool offers varying levels of control - from basic display options to in-depth custom programming through C-code syntax scripting capabilities. This enabled the ULEMCo team to rapidly develop their HMI solution, have complete customisation over the user interface and easily integrate sensor and CAN Bus data.



DISPLAYS FOR ANY APPLICATION

At their heart, Enovation are relentless in their pursuit of improved user experiences and performance-enhancing technology. With best-in-class viewability and a wide range of sizes, options and power, we can find you a display that will be the perfect fit for your application:

- Non-road Mobile Machinery
- Marine
- Specialised Vehicles
- Agriculture
- Power Generation
- Electric Vehicles
- Military

FOR FURTHER DETAILS, PLEASE VISIT: FOR MORE INFORMATION, PLEASE CONTACT:

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