



Case Study: TouchStar

UK-based TouchStar's range of TouchPC touch-screen computers are used in businesses and industries requiring robust field automation, including fuel distribution, on-board sales on airlines and trains, van sales and field service organisations.

Two of these products, the Raven and Kestrel TouchPC portable terminals, are aimed particularly at fuel distribution operations. Used in fuel tankers, they automate the process of logging fuel deliveries and reporting them wirelessly to fleet control centres and invoicing departments.

The handheld terminals are mounted inside the cab on a quick-release bracket, so they can easily be removed for use in mobile mode by the driver on arrival at a delivery site.

Safety is of paramount concern in the design and operation of electrical equipment in and near fuel tankers and the sites they deliver to, such as roadside fuel stations and airport fuel storage depots.

Particular care has to be taken with the battery inside the Raven and Kestrel devices: when mounted they are connected to the vehicle's electrical system, and fully-charged they are a concentrated source of electrical power in contact, or close proximity, with highly combustible liquids and gases. The battery must therefore be designed and manufactured in such a way as to prevent arcing and other dangerous electrical effects potentially arising from the charging and discharging processes.

In the petrochemical industry, stringent ATEX regulations govern the safe design and operation of electrical equipment. Design of the electronic circuitry that controls, regulates and isolates the battery pack is a complex and technically challenging task. So at the beginning of the process of developing the Raven and Kestrel PCs, TouchStar commissioned VARTA Microbattery's specialist CellPac PLUS service to design the circuitry for the battery packs, and pilot them through the ATEX certification process.

Using CellPac PLUS gave TouchStar confidence that it would achieve certification of a high-performance battery pack design within the project timeline, while keeping its internal engineering teams focussed on the design of the company's core delivery-tracking software applications.

TouchStar director Chris Phillips says: 'During the development process, we and VARTA Microbattery have become very familiar with each other, and the quality of the relationship between the companies has helped ensure that the projects went smoothly – we have worked hand-in-hand with each other to get the job done.'

'We like VARTA's flexibility – we have not had to adapt our requirements to their offering, rather VARTA have worked hard to deliver what we want the way we want it, right down to co-operating with other approved suppliers in the manufacture of the battery packs.'

'TouchStar would be very happy to use the CellPac PLUS service in future.'

If battery choice is important to your design and your company produces between 10,000 and 500,000 handheld, portable and wireless devices every year for the industrial, commercial, medical or automotive industries, speaking to VARTA's CellPac Plus technicians and project managers should be your next step.

Book your initial consultation now at:
sales@cellpacplus.com

