

Solution Case Study



Parcelforce identify vehicles and trailers & improve depot efficiency & management using Eureka RFID.

The 411 Eureka Tagging System is used for identifying the Parcelforce fleet of delivery vehicles at their depot in Coventry, England.

The system automatically identifies both incoming and outgoing vehicles and communicates data between one of seven security points and the Host scheduling system.

A major benefit to Parcelforce is that vehicles no longer need to be recorded manually at gatehouses. By reducing vehicle entry times, significant improvements to efficiency and trailer management have been made on site.

In conjunction with a fully automated sorting system they are now able to benefit from an integrated delivery, sorting and despatch systems, vastly improving overall efficiency.

System Hardware

The Eureka 411 Tag is a high performance radio frequency transponder with read write capabilities for use in a wide variety of data collection and identification applications. Characters can be read from or written to the tag at a range of up to 1 metre from a standard antenna.

The antenna is connected to a Eureka decoder, which controls and

monitors communications with both the tag and the user's equipment.

A long-life lithium battery maintains the tag's data memory, and provides the small amount of power needed to transmit data from the tag. Because of this the tag is referred to as an 'active transponder'.

System Operation

The Eureka 411 tagging system has been installed at two entrances and one exit at the International Hub and two entrances and two exits at the National Hub of the depot along with 2,250 active tags fitted to tractors, trailers and rigid vehicles at several depots throughout the UK.

The RFID system operates at low frequency (132kHz/66kHz) to communicate with the tags. The frequency used can penetrate all non-conducting materials, and will operate around metals. Allowing the tags to operate in most environments and not being affected by oil, dirt, water and ice.

Benefits

Vehicles no longer need to be recorded manually at gatehouses and pre-scheduled vehicles are automatically registered and given access to the site without gatehouse intervention enabling vehicle movements to be optimised to maximum efficiency.

Due to the complexity and size of the site, the Eureka tagging system

provides a highly effective automation solution bringing massive improvements in on-site trailer management.

The Read/Write tags can store tractor, trailer and rigid vehicle information as well as MOT and service information.

Reduced delays in unloading trailers at loading bays.

Faster and more accurate production of documentation on delivery information for drivers.

Conclusion

Using the Eureka RFID tagging system to manage vehicle activity provides a highly cost effective solution, which increases overall efficiency and helps to simplify the automation and management of such a large operation.



Vehicle & Trailer Identification Using Eureka RFID

Avonwood Developments Ltd.

Knoll Technology Centre, Stapehill Road, Wimborne, Dorset, BH21 7ND

tel: +44 (0)1202 868000 fax: +44 (0)1202 868001

email: sales@avonwood.co.uk web: www.avonwood.co.uk