

10 Wireless data networks

10.1 Introduction

Radio data communications is widely used within the port environment today. Common use includes communication from a central computer to mobile computers such as those that are hand held or fixed which are used by personnel on site or drivers of trucks, cranes and straddle carriers.

The most widespread illustration of radio data communication is with straddle carriers. Basically what happens is that a mobile computer located in the straddle carrier will be issued an instruction sent via radio from a central database to move a container from a particular location to a new location.

This instruction can be displayed on a computer screen in the straddle carrier cab, displaying a graphical representation of the container terminal, assisting the move from A to B.

When the movement has been completed the mobile computer will send a completed instruction back to the central computer, which updates the central database.

The significant benefit from using radio data communication is that it allows transfers within the container terminal to happen in real time, with the immediate updating of container movements.

The central computer can assign a carrier to do a particular job based on what equipment is most suitable, instead of previous methods of assigning certain carriers to particular zones of the yard.

The radio data communication link can also be used to transmit sensor data from the container moving equipment to the central computer, for example giving details about its location obtained using positioning satellites (GPS). If a crane or straddle carrier is in an incorrect position an alarm will be issued.

10.2 Psion Teklogix

www.pSIONteklogix.com

Psion Teklogix is one of the global leaders in wireless data communications for supply chain and inventory management. Currently Teklogix systems are used in over 100 ports globally.

Psion Teklogix was created by the acquisition of Teklogix International by Psion PLC in September 2000, to create a new Psion product division, Psion Teklogix. Psion Teklogix will be a global organisation based in Mississauga, Ontario and will be led by former Teklogix President and CEO, Ian McElroy.

Psion Teklogix has become one of the leading wireless data communication companies specialising in communications for ports ranging from Iceland, South Africa, Southern California and China to name a few. Teklogix has created tools to assist terminals in the