

Proximal monitoring of vehicles

2008-04-22

Location / Country : Taiwan

Product Solutions:

[UC-7410](#), [UC-7420](#)

RISC-based ready-to-run computer with 8 serial ports, dual LANs, USB, PCMCIA, CompactFlash

Introduction

Project Introduction

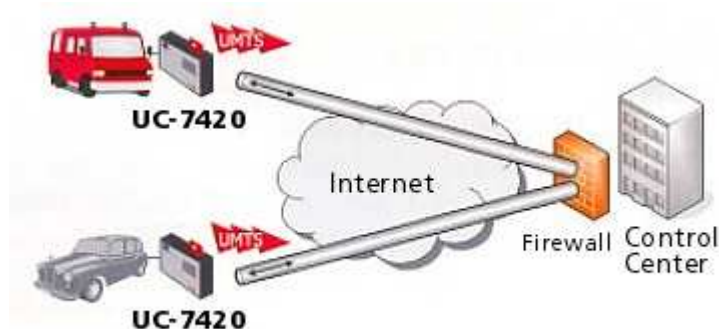
MOXA's UC-7420 embedded computer is a miniature front-end computer for device networking applications that is ideal for vehicle monitoring systems. The UC-7420's small size, multiple connection options, no-fan/no-hard-drive design, and programmable Linux operating system combine to give system designers a great tool for building a robust system that can be used both indoors and outdoors.

Proximal vehicle monitoring involves detecting or observing vehicles that enter a fixed "live zone." Important vehicular behavior can be obtained by establishing multiple live regions at different locations. There are two types of proximal monitoring: Smart Vehicle Monitoring and Dumb Vehicle Monitoring.

Moxa Solution

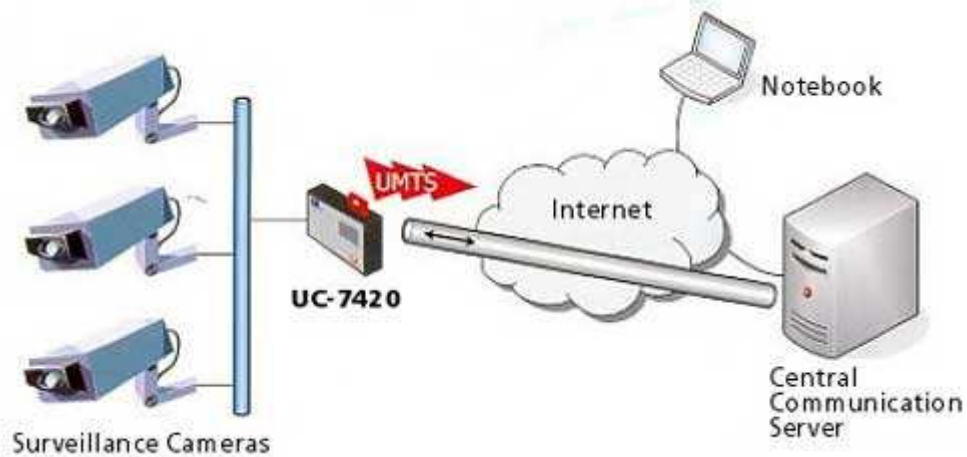
Smart Vehicle Monitoring

In this case, a computer with a wireless Ethernet card installed is located in the vehicle. The live zone is the connection region of a wireless LAN. When the vehicle enters the wireless LAN region, the vehicle connects to the network to download information to a central location, or receive updates from headquarters.



Dumb Vehicle Monitoring

In this case, the vehicle operates independent of the monitoring device. Monitoring is usually done by a surveillance camera. Vehicles are monitored as they enter and leave the zone, and with the right kind of software, speeds can be recorded, with pictures stored for later reference.



Why Moxa

- No fan, no hard drive design for longer MTBF
- CompactFlash slot for adding gigabytes of storage space
- Multiple connection options for greater networking versatility
- Programmability gives system integrators infinite possibilities