ARC-10
GSM Controller

Intelligent traffic control
Vers. 1.0 – January 2012

Introduction

Intelligent traffic control systems, rely on intelligent controllers usually widespread in a metropolitan area. Traffic control equipment are installed in various roadside cabinets and need to be monitored in real-time to remotely control and minimize downtime.

The most effective method of communication is over a GPRS network.

Requirements

- Online connected traffic controllers geographically distributed
- Quadband GSM/GPRS Edge modem compatible
- Event-driven alarm messages for power failure, intruder, fault
- At least two digital input channels
- At least two relay outputs to reset power
- Serial interface
- SMS remote control
- Low cost, Maintenance free, easy mass deployment

Proposal
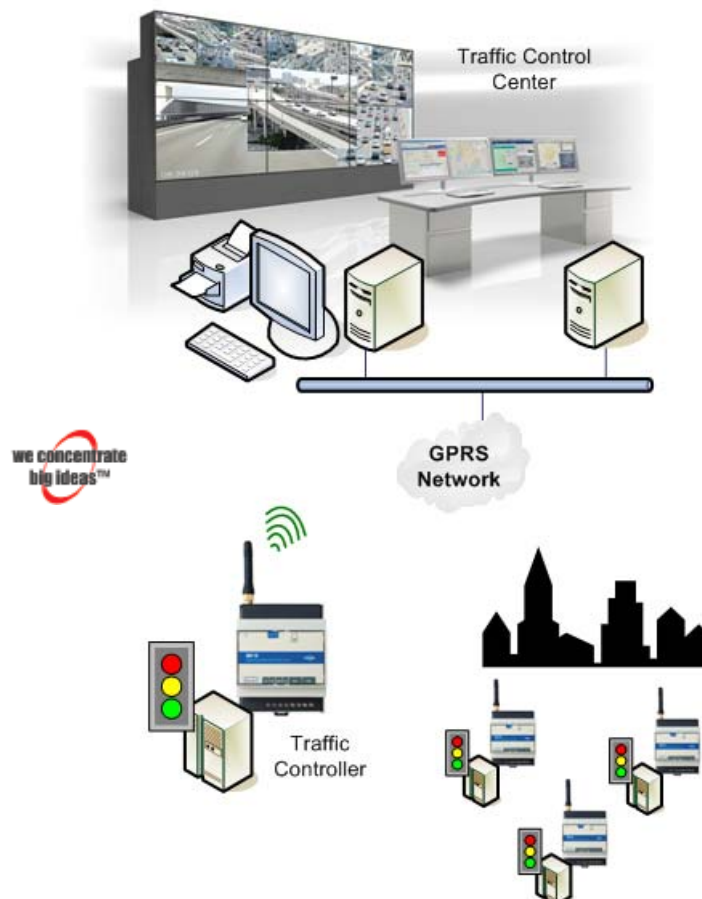
Almost all traffic controllers have a serial interface to connect to a GPRS modem and use it to connect to a central traffic control system.
Eliminating the need to invest in new traffic equipment authorities can use the ARC-10 GSM/GPRS controller with built in IO to realise an online system of traffic controll.

Using the ARC-10 engineers in the control centre can monitor the status of each traffic light, update the control programs as traffic conditions change, reset traffic controllers and also to get alerted of power failures.
The ARC-10 is an embedded engine combining the power of an advanced GSM modem and an ARM CPU. It can be used to upgrade a traffic management system providing online centralized control to monitor and controls traffic lights all over a metropolitan area.

ARC-10 is designed for extreme conditions with operational temperature at -20oC .. +80oC, it has build in 2 DIs and 2 power relay outputs.

Reliability is one of the most important factors for remote connectivity and monitoring applications, and with Infinite's products, users can rest assured that their communication monitoring technology will be secure, reliable and maintenance free.

Why ARC-10
- All-in-one cellular GPRS quadband solution
- Low Cost
- Real-time data acquisition
- Easy to implement and maintain
- Two way SMS alarms, control commands & M2M functionality concurrently with GPRS