

# Wireless Remote Monitoring and Control

## Description

MCR produces monitoring and control solutions designed to increase management control and reduce risk. The Guard Series products can be used to protect and monitor public facilities, small commercial businesses, public transportation, cargo containers, semi trailers, trucks/vans/RVs, boats, cottages and other assets in storage or while in transit. Our solutions can be wireless and can cover just about any aspect of operation from security to access control to video monitoring and retrieval. If a customer has access to a cellular phone or the Internet they will be able to access real time information and, most importantly, take action to alert the proper people and even control key pieces of equipment.

The Guard Series technology can dramatically reduce the costs of loss due to theft, vandalism, equipment failure and unauthorized inventory access. The technology also enhances safety monitoring and response plus reduces manpower for routine tasks that benefit from automation. All the above can result both in real cost savings and reduced insurance premiums.

The MCR systems can be configured remotely and can handle a number of completely separate functions through one central control unit. Data can be stored for later retrieval or instantly sent for immediate response.

Installation is straight forward and an extensive number of analog and digital devices can be monitored and controlled through a single central unit.

MCR has spent over four years developing technology that is versatile, sophisticated but simple to use, durable and very cost effective.

Customized to suit your needs, MCR's **AicAAA™** (Access to information and control **A**n anytime, **A**n anywhere from **A**n platform) proprietary technology can offer services such as multiple-subscriber message delivery, flexible logical to physical object mapping, message logging, real-time control and event-driven action generation. The Guard Series provides event-driven E-mail, SMS and MMS (picture) messaging to wireless mobile devices (phones/PDAs) as well as real time control.

A complete OEM peripheral component list is available on request.

## Controller

- Rabbit 3000 processor
- Real Time uC/OSII
- Real Time Clock, Watchdog
- Solid State Flash memory for remote software update and non-volatile data storage (up to 512 Kbytes)
- BIOS: Rabbit 256 KB Flash
- Operating SRAM memory (up to 512 Kbytes)
- 16 Digital inputs (opto-isolated)
- 10 Analog inputs, 8 Relay outputs

## Ethernet Interface

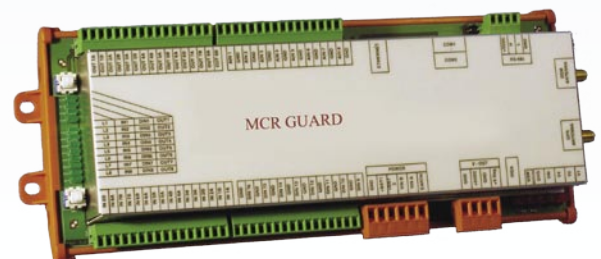
- 10/100BASET, RJ45 network connector
- TCP/IP support

## Serial Interface

- 6 fully independent Serial Ports (one DB9 connector)
- Serial speeds up to 115.2 kbps
- One RS-232 port, one RS-232/RS-485

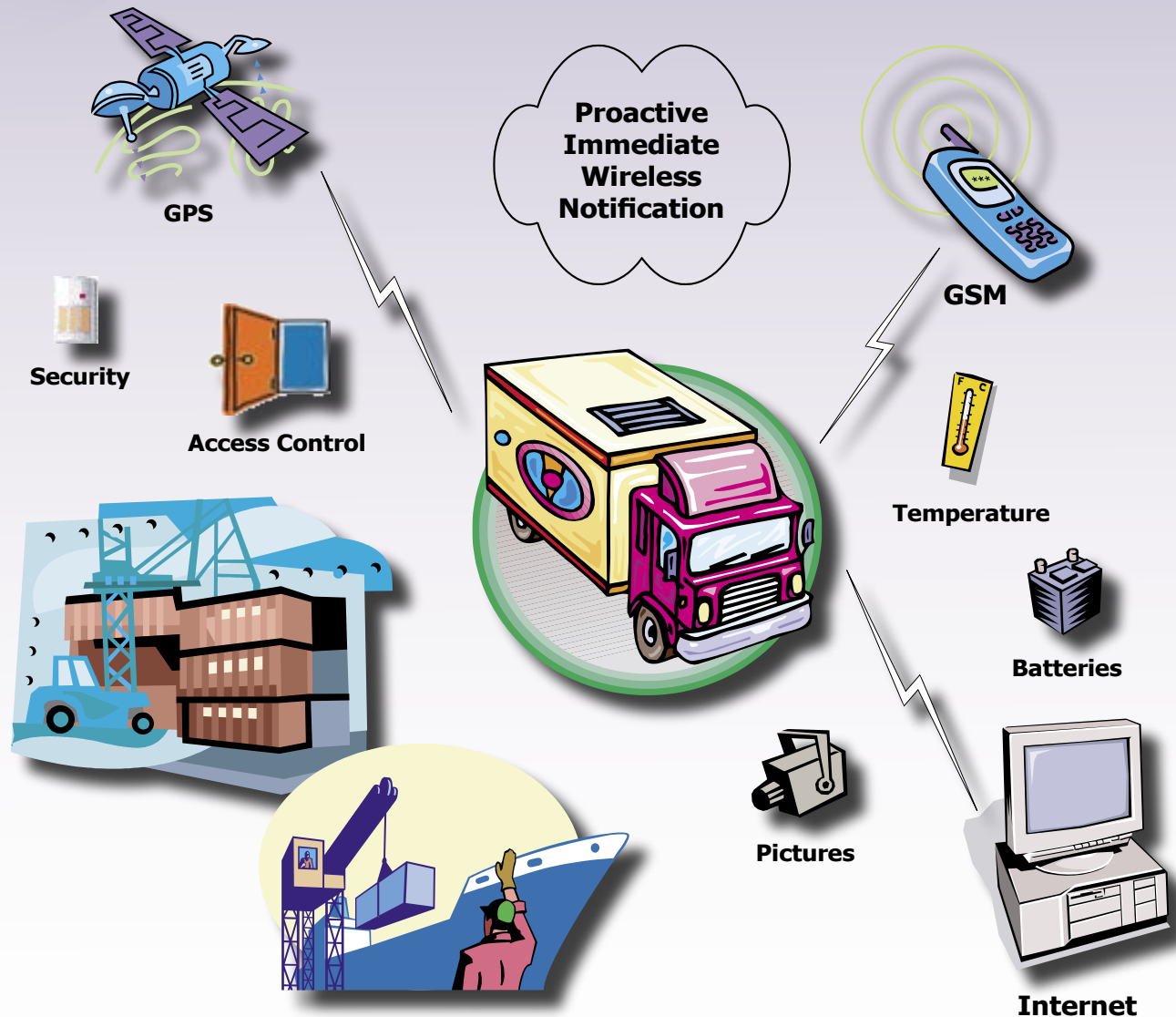
## Wireless Interface

- GSM modem support
- GPS Global Positioning System support



## Trailers and Containers

Wireless Remote Monitoring and Control



### 3 Models Available:

MCS (Monitoring and Control System) is our entry level system with 10 analog inputs, 8 digital inputs and 4 digital relay outputs.

MCSG (Monitoring and Control System with GPS) has an added built-in GPS for tracking and storing several weeks of position co-ordinates.

MCSGC (Monitoring and Control System with GPS and Camera) has an added built-in camera/picture capability for sending pictures to your cell phone and/or E-mail address. It also has increased number of I/Os. 10 analog inputs, 16 digital inputs and 8 digital relay outputs.

While your trailers/containers are parked at the dock or on the move, vital signs such as global position, speed, fire, intrusion, multipoint reefer temperature monitoring, low battery and other parameters are monitored. Alerts are immediately generated wirelessly to your specified mobile phone numbers and E-mail addresses. The system can report trailers entering or exiting a landmark set by the fleet, as well as alert customers if a trailer equipped with optional cargo and doors sensors is unloaded or doors opened outside of its intended destination. Remote control of the generator, refrigeration, door locks, heater, etc. as well as camera(s) surveillance can be provided over the Internet and the mobile phone network.