



Audience

- Municipalities
- Governments

Advanced Coverage

Unique coverage through combination of advanced wireless technologies.

Fire Detection Cells

Fire Detection Cells are the detection units that will be used to deploy the Fire Detection Network. Every cell is managed by a SmartCity CPE+ device, webcams and multiple fire sensors.

SmartCity® Network

The SmartCity wireless network is the basic infrastructure required for the deployment of the system and the alert forwarding to the FDS Central.

Advanced WebCameras

Visualization of an area managed by a Fire Detection Cell is done through 1 or more webcams that can be accessed by multiple simultaneous users.

FDS Central Server

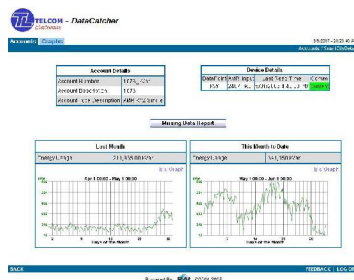
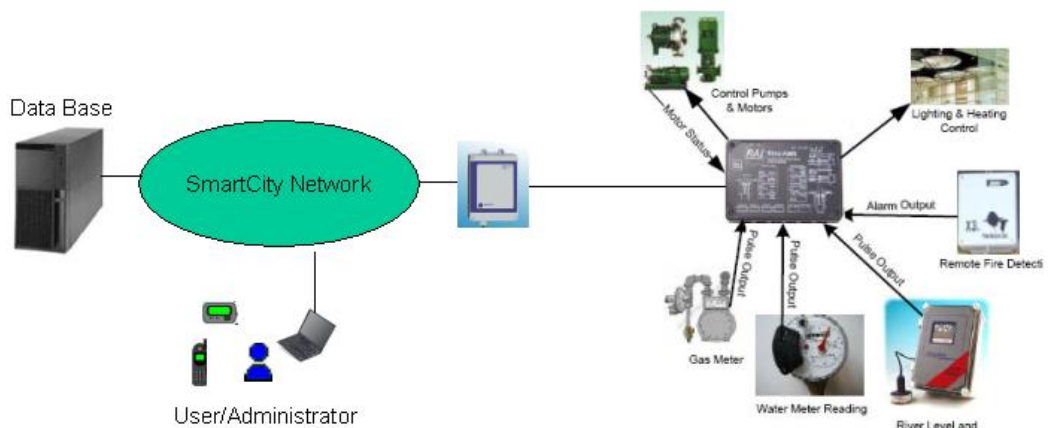
A centralized processing server with a Web-based interface will handle all incoming alert signals and will allow automated activation of cameras, messaging to firefighters or activation of other flame retardant systems.

Expandable, Affordable

Especially designed for municipalities & SmartCity operators the system will take advantage of existing infrastructure reducing installation costs.

Unified Management System For Industrial Applications

Municipalities often manage utility networks like: water distribution, used waters, electricity, security cameras, that usually require remote control devices for the system centralized management and other consumption metering devices. The SmartCity telemetry platform is a centralized management system for the control of the municipality industrial applications.



Campus Overview



Simplified Architecture

The SmartCity telemetry system gathers information, such as where a leak on a pipeline has occurred, transfers the information back to the central database, alerting the home station that the leak has occurred, carrying out necessary analysis and control, such as determining if the leak is critical, and displaying the information in a logical and organized fashion. The system can be used for relatively simple installations, such as one that monitors environmental conditions of a small office building, or incredibly complex, such as a system that monitors all the activity of a municipal water system.

No More Concerns About Industrial Protocols

The EtherBox used by the SmartCity system will dissipate all concerns about industrial protocols making the data acquisition easy and reliable over the SmartCity wireless network.

Interfaces with Any Device Type

Inputs for counting pulses for metering devices, digital inputs for detection switches like fire detectors and serial inputs for a flexible information exchange with devices like meteorological stations. Capable of storing over 400 days worth of data locally the EtherBox device will automatically upload data collected during network outages. Its clock is auto-synchronized and is accurate to within +/- 1 millisecond of an NTP time-server.

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No Polling

By default 5-minute interval data is automatically uploaded to the central database.

Local Data Storage

The EtherBox device can store 400+ days of meter data at 5-minute resolution.

Data Output

Meter data can be downloaded directly from the EtherBox device through a web browser and manipulated with any spreadsheet or database software.

Dialup Capable

Upload interval can be adjusted so that it only connects the central database every hour to deliver data.

Redundant Databases

Capable of simultaneous communications with up to 5 separate databases. This feature is ideal for adding redundancy to billing systems or delivering the data to separate companies.

Backup Communication Path

Can be configured with primary and secondary communication path. This feature provides guaranteed data delivery for critical metering points by automatically detecting network communication failures and routing traffic through its secondary path.

4 KYZ Inputs

Easy connects to any meter gas, water, or electric with pulse outputs

4 Digital Inputs

The auxiliary inputs can be used to monitor data point such as tamper detection switches or backup power status

Digital Over Sampling

All inputs use digital over sampling to prevent line noise and switch bounce that could cause false readings.

4 Multifunctional Digital Outputs

Outputs that can be controlled from the EtherBox device web interface or directly from the central server. Output modes include 1-shot, on/off, or pulse-train with variable duty-cycle. They can be used to control any device or process.

New Features

- 5 logs, keeping critical logs separate from non-critical logs
- Alert emails containing the alert code
- Output settings are in the flash memory so any settings will not be lost on a complete power loss and battery failure
- Full version page, including manufacturing date
- Will send its configuration to the central database to record a history of changes



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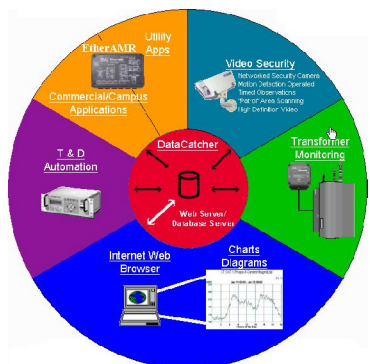
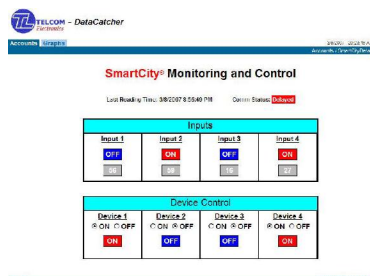
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Time Span	Hour
# Pictures in Time Span	30
Transition Speed	Medium
End Time	NOW 12:00
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Implementation considerations

The EtherBox has been developed for a wide variety of uses and customizations. Each product provides unmatched value for developing cost-efficient power management practices. The EtherBox device can be customized to fit any size system: meter monitoring for municipalities, utility companies, industrial and commercial site load monitoring, and office or residential energy monitoring.

Utility Interchange – Meter Logging

The EtherBox device is a powerful tool for forecasting system load for up to the minute scheduling. The device can accept KVarh input pulses and second reactive power as well. Using all four inputs makes it possible to monitor KWh and Kvarh in both directions for any interchange point. The device enables the utility to monitor its overall load in real-time and the data can be compared to billings for accuracy.

Industrial - Commercial

Industrial/Commercial units allow the customer and the utility to view the metering data through a browser for any number of devices. Distinct views or presentations can be configured for different users e.g. plant floor operators, plant managers and the Utility. A router firewall can also be included with Industrial/Commercial units to provide significant additional data security. Depending on the size of EtherBox system, administrators can control loads easily for any site, anywhere in the world.

Office - Residential

Residential or office units enable customers and utilities to view real-time meter data on the Internet or Intranet and post data to any database. Residential or Office EtherBox products are designed to help conserve energy as well as cost. Apply the unit on any vendor meter and monitor the usage remotely or from the office. These units can be supplied with Home Automation devices or relays to load control.