Improving Safety with Remote Telemetry Units

Safety is a primary concern for many utilities and production facilities. Organizations have legitimate concerns about terrorism, security breaches, waste containment, and potential environmental effects. Government agencies in many cases require the use of remote telemetry systems, or RTUs that can provide notification of security breaches and status alarms to facility management 24 hours a day, 7 days a week. Any of these issues require personnel to be notified immediately so appropriate action can be taken to secure the facility and minimize damage to equipment or the environment.

Cimtec Sentinel RTU Systems

The Sentinel RTU includes of the following components:

Enclosure - Class 250 Type 4 (Exceeds NEMA 3R) UL Listed

Un-interruptible battery back-up - Provides seamless switchover to battery power upon AC main power loss and switchback to normal AC power source upon restoration with continuous battery charging.

Communication System - Each Sentinel RTU has a communication system that allows data to be accessed remotely.

Surge suppressor - Each telemetry unit location was provided with a bulkhead-type, Polyphaser coax surge suppressor connected at the enclosure junction of the antenna coax. Cimtec provided standard Type N connectors for all antenna connections. The transmission cable is suitable for direct environmental exposure.

Instrumentation - An array of sensors is included within each RTU, and the sensors are selected for the specific application needs.

Cimtec has developed the Sentinel RTU package to address all of these needs and can be easily tailored to any facility type in any industry, including:

Lift Station Monitoring
Environmental Monitoring
Homeland Security / Public Safety
Mobile Asset Management
Energy Management Systems Remote Data Collection
Utility Service Monitoring
Stand-by Power Monitoring
Off Shore Applications
Oil and Gas Monitoring

For example, one application that Cimtec has adapted the Sentinel RTU to is remote water condition monitoring. This particular system includes sensors to monitor chlorine levels,

email to managers.   Integration with Sentinel Plus software allows a supervisor to monitor hundreds of locations from one computer.

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The Sentinel RTU includes of the following components:

1. Select the Sentinel RTU that is right for the application. The Sentinel 1000 supports up to 4 digital inputs and one analog input, while the Sentinel 3000 supports up to 12 digital inputs and up to 4 analog inputs.
2. Select the communication method. The Sentinel RTUs support a variety of communication methods, including Ethernet, landline telephone, and wireless options such as cellular, radio, and satellite communications. All communication hardware is installed and configured by Cimtec before delivery, so the RTU can be set up quickly.
3. Configure the Sentinel RTU alarms for the specific application. Over a dozen pre-installed monitoring routines are included on each Sentinel RTU. Choose the specific monitoring routines that are required, set high and low alarm limits, define the importance of each alarm, and create an alert scheme to determine who should be alerted for each type of alarm.

Both models of Sentinel RTUs are fully compatible with the Sentinel Plus web application, which allows personnel to monitor system status over the Internet from anywhere in the world.