

Environmental Monitoring System

Introduction

Reliable and seamless environmental monitoring is essential for comprehensive safety, quality and production assurance and compliance especially in the fast moving consumer goods (FMCG) industry.

Synertech's Environmental monitoring uses state of the art sensors provide full visibility of controlled areas and assets. With pre-set trigger levels, real-time alerts are triggered by environmental exposure conditions, enabling users to immediately identify and address any issues within business operations. This system also employs rugged semi-passive RFID temperature logger UHF tags to monitor temperature sensitive products during transportation making it an effective way to track and trace these products during the delivery process.

Real-time and historical data provides peace of mind to customers that goods are being stored and transported correctly with live monitoring and an accurate audit trail. Information can be viewed via dashboards with dedicated reports and alert functionality.

Monitoring of products environmental exposure provides an unbroken record to ensure the freshness, quality, and compliancy of all types of goods that require exposure monitoring.



Real-time quality assurance

Traxsense

Synertech's Traxsense software platform brings to life innovative, automated monitoring and tracking solutions by providing clients with dashboards and analytics to easily track all assets and to monitor business performance indicators. Smart sensor enabled assets are transformed into intelligent data sources. These smart assets are connected in real-time which provides organisations with controlled and auditable IOT information. Traxsense not only provides for immediate management decisions, it also harnesses the power of data analytics for business optimisation.



Business Benefits

- **Enhanced compliance and risk management** – Traxsense conforms to standardised general accounting and auditing standards
- **Improved tracking** – Traxsense accurately tracks and monitors the movement and condition of business assets in real time
- **Increased security** – Traxsense can be configured to provide alerts and alarms as well as links into other features such as closed-circuit television (CCTV) and biometric access control
- **Unrestricted access to data** – The ability to provide completely objective and consistently reliable data that can be accessed by authorised personnel via the web, from anywhere in the world on virtually any digital device on a 24/7 basis
- **Objective and reliable data** – The provision of data that is totally independent of any other source of information due to the automation that eliminates human error and prevents manipulation associated with spreadsheets and manual systems
- **High level of customisation** – Traxsense is quickly and easily customised to meet the exact requirements of virtually any business environment

Key Features

- A full featured web-based environmental monitoring system
- Realtime data at your fingertips
- Improved quality standards compliancy
- Radio Frequency Identification (RFID) enabled UHF
- Multitude of sensors



DNA Tracing for Rhino

Components

A combination of different RFID tags are utilised to ensure that optimal readability is achieved depending on the asset that requires tracking and to be able to withstand the elements.

EnviroTags are used for the recording of temperatures at pre-set intervals. The recorded temperatures are downloaded or extracted by means of mobile or fixed interrogators or fixed RFID readers.

TempProbe are designed to monitor the temperatures in specified locations or areas according to prescribed environmental operating conditions. The probes are supplied with electronic control units which communicate data to management systems.

Humidity Probes are designed to monitor and record humidity levels in prescribed areas or locations.

Used with fixed or handheld RFID readers that collect data programmed into the RFID tag and 2D barcodes, the information is then be passed on to the main management system for reporting.



Environmental Monitoring

After-Sales Service

- **Warranty** – All systems are backed by a 12-month warranty on materials and workmanship commencing from date of delivery
- **Maintenance and support** - A range of technical support and maintenance options are available based on formal service level agreements
- **Training** - Various training options are available ranging from comprehensive classroom training to on the job training. All systems are provided with training documentation

Summary

Designed, developed and implemented by Synertech, a proudly South African company with nearly two decades of success is at the forefront of supplying innovative RFID technological solutions to clients across a broad range of industry sectors.