

Zenatek Tracking System



Going beyond the known limits



The Zenatek Tracking System

The Zenatek Tracking System provides security and confidence that goods will be delivered on time and in the required conditions.

With sophisticated sensors, The ZTD precisely monitors environmental and security conditions. Unauthorized movements, temperature and humidity changes, opening of containers doors can be detected and reported from virtually anywhere on Earth.

The ZTS solution captures and stores real-time monitoring data and transmits it worldwide over GSM/GPRS networks covering over 200 countries and equipped ships.

Unlike many other modules of this type, the Zenatek Tracking Device is not required to be recovered and sent back to the sender, eliminating all costs associated with these task (e.g. recovering personnel, forwarding, re-configuration, re-stocking, etc.)

However due to its extended battery life, the user can keep using the unit until it runs out of energy and then dispose of it.

From anywhere in the world you can obtain

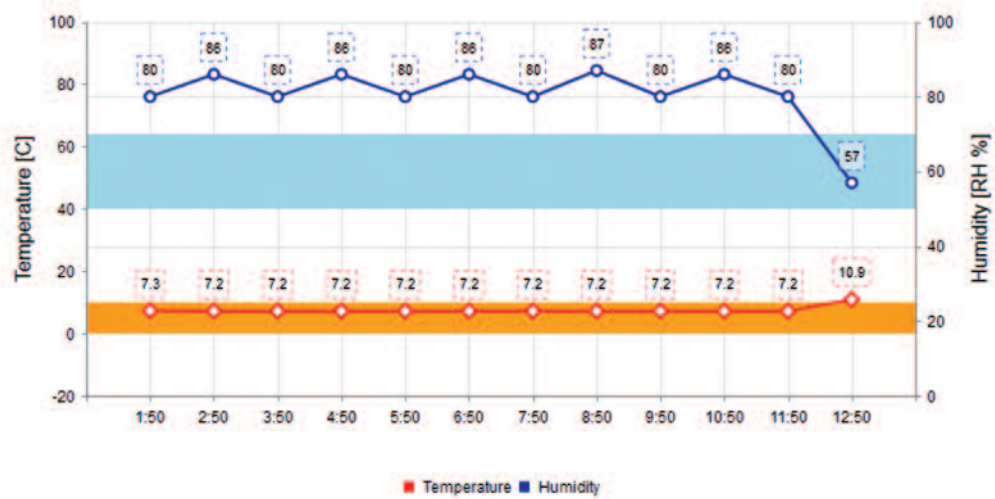




FOLLOW the container from departure to destination



PINPOINTING the position



ANALYSE temperature and humidity changes



Different usage purposes

Features

With no cabling, external power or antennas, installing and uninstalling this small self-contained device is easy and does not require specialized personnel and/ or special tools.

If installed in full sky view on the assets you need to trace, the device will provide the extremely precise geographical position, whereas if you need the tracking traced from inside a container, or inside a metal box, the device will give ambient data such as humidity and temperature and the position with a fairly good level of accuracy.

Operation mode

The ZTS enables asset and goods tracking and monitoring either in container or not:

- Scheduled position tracking,
- Special alert messages if anomalies are detected.

Scheduled Position Tracking

The device is configured to communicate the asset position acquired from GPS satellites or cellular tower signals, at pre-defined intervals in compliance with client's requests.

Alert Messages

The device incorporate different sensors and it may be configured to send in real time automatic alerts by e-mails reporting the type of a sudden unexpected events.

Details may include:

- Container door opening,
- Inappropriate handling of the container or good transported with a Shock detection alarm,
- Device detachment alarm and tampering alarms,
- When the temperature and humidity in the containers are controlled, and the temperature and/or humidity exceed the pre-defined established range, then is triggered an alarm,
- If geo-fencing system has been settled, the monitored item get outside the defined area, an alarm is triggered,
- If installed in dry container, an alarm is triggered when the internal temperature reaches 75°C.
- The nominal operating life of the lithium batteries is about 12 months, depending on the frequency, the amount of data transferred and the environmental temperature.

Zenatek Data Analysis

The ZTS system provides real time event data and reports for the complete trip duration time, for enhancing efficient invaluable strategy, in a very short time.

Corporate Operational Centre

Zenatek offers to each client the use of the Corporate Operation Center. Your unique account and password allows monitoring an entire fleet of containers or assets. Zenatek can also provide a customized 'turn-key' Operation Center.



Typically for enterprise level customers or those handling critical goods, this solution assures maintenance and future software upgrades. Thanks ZTS you may have positive and advantageous negotiations rates with your insurance partner. The ZTS solution aids your transport strategies, ensuring constant real-time monitoring and improving security of your goods while in transit, at a lower cost.

Technical Specifications

Hardware

- Self-contained, disposable single unit (includes electronics, antennas and batteries),
- Robust industrial design, impact resistant materials, standard IP 65 weatherproof protection grade,
- Dimensions: 150mm (L) x 99 mm (W) x 43 mm (H),
- Operational temperature: from -30°C up to +85°C,
- Humidity level: from 0% to 100% RH,
- Storage temp.: from -20°C to +80°C
- Weight 317 gr.
- Protection class: Ip 65

Positioning & Compliance

- Highly sensitive GPS/GLONASS receiver, GALILEO ready,
- Detailed Google mappings,
- EU and FCC approved,
- Ultrafast acquisition time,
- Patch aerial on PCB,
- Geo fencing,
- Geo coded proof of delivery.

GSM transmitter/receiver

- Quad band GSM 850/900/1800/1900 MHz worldwide,
- Quad Band Ceramic Aerial on PCB,
- Configurable profile for data exchange interval,
- Internal flash memory for storing messages in poor GSM coverage.

Environmental sensors

- Temperature: senses and samples internal temperature with adjustable alarm thresholds and hysteresis, from -25°C to +75°C accuracy Range $\pm 0.5^\circ\text{C}$,
- Humidity sensor: senses and samples internal humidity with adjustable alarm thresholds and hysteresis Range RH: 0% to 100%, accuracy $\pm 3\%$,
- Optical: sensitivity 0.01 lux, accuracy 0.2%
- Accelerometer: 3 axis: for detection of accident and crash $\pm 2g/\pm 4g/\pm 8g/\pm 16g$
- Compass: magnetometer 3 axis (X,Y,Z)
- Gyroscope: 3 axis (X,Y,Z)

Communication Protocol

- Secure encrypted data transfer for outmost confidentiality and protection.

Power

- Easily switch on/off for airplane use,
- Sealed Lithium-thionyl chloride (Li-SOCl₂), 3.6 V dc, 14,5 h, size "D",
- IEC 86-4 conformity
- Battery life: 360 days since activation, sending 1 position/day.

Installation

- Powerful magnetic anchorage, adhesive pads and flanges.
- Quick and easy positioning for initial setting and activation.



Zenatek S.a.r.l.
"Le Millefiori"
1, Rue des Genêts
98000 Monte Carlo
Principality of Monaco

Zenatek Inc.
350, Fifth Avenue - 41st Floor
Empire State Building
New York - NY 10118
U.S.A.

www.zenatek.com
monaco@zenatek.com

Partnership:

