



LogiBoxx Certified Solutions

Continuous Visibility: In Real-Time, All The Time

What is it?

LogiBoxx Certified Solutions from EarthSearch refers to a portfolio of hardware and software solutions designed to allow enterprises to track and secure their stuff in real-time, all of the time.

What does it do?

A LogiBoxx combines Intelligent GPS with an RF Module embedded in the hardware. It then transmits critical location, time and security information to secure servers which run GATIS. GATIS provides continuous visibility of your stuff in real-time, all of the time via a web browser or compatible smart phone.

Why should I care?

A LogiBoxx Certified Solution offers Continuous Visibility which allows your organization to know where all of your stuff is real-time, all of the time. It can also provide real-time alerts should unauthorized attempts be made to access your stuff.

Overview

Organizations have long known that keeping track of their valuable assets, or stuff, is mission critical. You may be a shipping company transporting high-end electronics thousands of miles; a pharmaceutical company which needs to assure its customers that its supplies are free from tampering; or a livestock firm with many animals for which you need to be able to account. No matter what kind of stuff you have, a LogiBoxx Certified Solution will allow you to keep track of your valuable assets.

With Intelligent GPS combined with an RF module in the hardware, LogiBoxx can communicate with LogiBoxx Certified RFID readers to read passive RFID tags, or it can read LogiBoxx Certified Active tags directly. LogiBoxx, in turn, communicates via the GPRS wireless network to secure servers running GATIS. GATIS (Global Asset Tracking Identification System) is a web-based application which allows operations centers to view mission critical data about their stuff. In real-time, all of the time.

Continuous Visibility Of Your Stuff

A complete LogiBoxx Certified Solution begins with our Intelligent GPS device, the LogiBoxx. Next we add GATIS which offers LogiBoxx visibility to the operations center as well as a host of customizable options. We build on these with a variety of LogiBoxx Certified RFID readers and antennas, all of which can communicate wirelessly with the LogiBoxx.

Non-Mechanical Seals are available in a wide variety of form factors to embed or attach to a wide variety of stuff. We also offer the LogiBoxx Certified RFSeal and TrailerSEAL, while the optional MobileManager allows for an additional level of security, management and communications between your drivers and your operations center.

The LogiBoxx Hardware

At the heart of a LogiBoxx Certified Solution is the **LogiBoxx**. An Intelligent GPS device, the LogiBoxx can be vehicle mounted to monitor stuff on a truck. Alternatively, a set of LogiBoxxes can be mounted at various points in a warehouse, retail store, shipyard, assembly plant or any other facility to monitor the flow of your stuff as it enters or exits a facility.

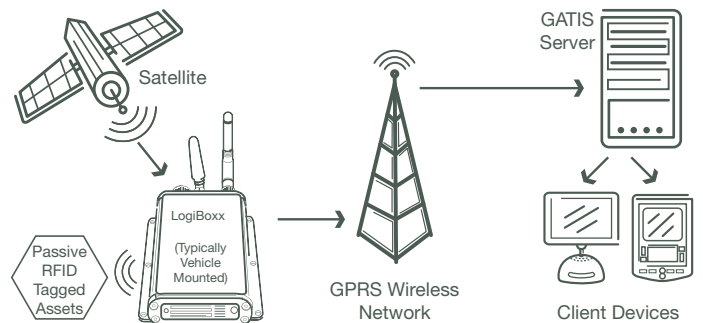
The LogiBoxx features six customizable sensors which can be configured to monitor a wide variety of common activities, such as door sensors, trailer attach/detach, temperature levels, vehicle speeds, seatbelt usage, vibration/tampering and much more. It also features Intelligent GPS in the hardware so that operations will always have access to the location of the LogiBoxx.



A LogiBoxx is the centerpiece of a complete LogiBoxx Certified Solution.

All LogiBoxxes have RF Modules built into the hardware. This module can be configured to read LogiBoxx Certified Active tags directly, or it can communicate wirelessly with a LogiBoxx Certified RFID reader to read Passive RFID tags. By placing these readers at specific points in a facility or a vehicle, you'll be able to track your Passive RFID tagged stuff, as well as knowing that your stuff is moved to the right location or put on the right vehicle for delivery.

LogiBoxx Certified Active RFID Tags use an internal battery within the tag to continuously power the tag and its RF communication circuitry. Passive RFID relies on RF energy transferred from the LogiBoxx Certified RFID Reader to the tag to power the passive tag. In layman's terms, the ActiveRF tag sends a signal which says "Here I am," while a PassiveRF tag says nothing, needing a PassiveRFID reader to send a signal to the tag in order for it to be located. Please consult with your EarthSearch representative or reseller to determine what solution is right for your organization's needs.



LogiBoxx communicates wirelessly with GATIS via the GPRS Network - the same network used by many cell phones. The LogiBoxx location is tracked by satellite. Optionally, the LogiBoxx could also communicate with an RFID reader. This results in continuous visibility of all of your stuff - including your tagged vehicles, equipment and personnel - in real-time, all of the time.

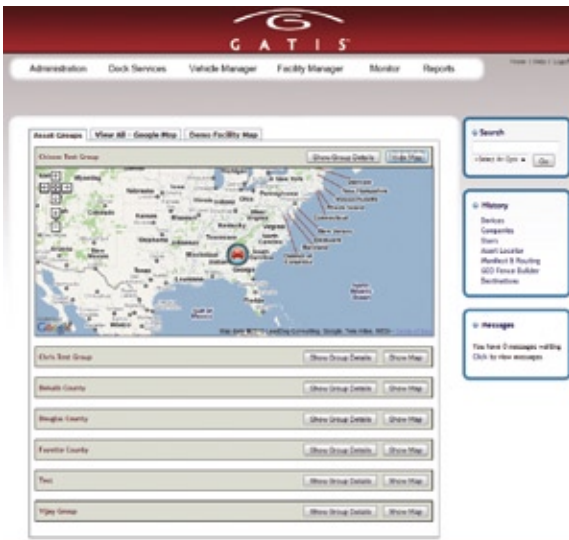
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GATIS Middleware

GATIS stands for “Global Asset Tracking Identification System”, and is the web-based software component of the LogiBoxx Certified Solution. Much like how a computer needs an operating system to be truly useful, a complete LogiBoxx system relies upon GATIS to function effectively.

Each LogiBoxx is able to communicate with the GATIS system via the GPRS wireless network – the same network which many cell phones rely upon for ubiquitous coverage. GATIS gathers all data being tracked and monitored by LogiBoxx and LogiBoxx Certified Components and then processes that data via a customizable user interface which can be viewed by any standard web browser or smart phone.

Users of GATIS will have access to six main functional areas – Administration, Dock Services, Vehicle Manager, Facility Manager, Monitor and Reports. GATIS can be configured to feed information into any ERP solution (at an additional cost), or you may choose to leverage a standard XML feed. Customization is available via task-specific modules which can meet your unique needs.



Continuous Visibility - The GATIS Middleware allows the enterprise to both track and to secure all tagged assets in real-time, all the time.

LogiBoxx Certified RFID Readers and Antennas

There are three LogiBoxx Certified RFID Reader models as well as two types of LogiBoxx Certified Antennas. This allows you to select the best option for your unique use case.

We offer two LogiBoxx Certified Readers which each have antennas built into each unit. Model ES1001C has a circular polarization antenna capable of reading tags in a 360 degree sphere which radiates up to 6 meters around the unit. Alternatively, model ES1001L has a line polarization antenna intended to read tags within a 40 degree “wedge” radiating from the front of the device. The ES1001L is capable of reading tagged assets up to 12 meter from the antenna.

The LogiBoxx Certified Four-Port RFID Reader, ES1004L, can be connected to as many as four external antennas.



The LogiBoxx Certified Four-Port RFID Reader can be connected to as many as four antennas.

This is an ideal solution should you wish to track the direction in which a tagged asset may be moving – North to South, East to West or even Up and Down – crucial should you need to track your stuff in a multistory building, underground in a basement or even a mining operation.

Designed to be connected to the ES1004L, we offer two LogiBoxx Certified Antenna models. Once connected to the reader, model ES2002AC's circular polarization antenna is capable of reading tags in a 360 degree sphere which radiates up to 7 meters around the unit. Meanwhile, the ES2001AL's line polarization antenna is capable of reading tagged assets within a 40 degree “wedge” radiating from the front of the device. It has a maximum effective range of 10 meters from the front of the antenna's surface.

All LogiBoxx Certified RFID readers can communicate directly with a LogiBoxx – either via a direct cable connection or wirelessly. All wireless communication can be secured by commercial or military grade encryption.

A Complete Yet Customizable Solution

LogiBoxx Certified RFSeal

The **LogiBoxx Certified RFSeal** is a battery powered container sealing unit with RF capabilities built into the hardware. It is designed to be used on trailers or shipping containers to secure cargo. It may be used in conjunction with a LogiBoxx through which it communicates wirelessly to GATIS. The RFSeal is capable of storing detailed information about the contents of the trailer. It can be operated with a key to lock or unlock the trailer and each locking and unlocking activity is recorded so that the opening and closing of the cargo container can be tracked.

The seal is made of steel and has the ability to withhold a force of up to 250lbs. The seal also sends an instant, real-time alert to a connected LogiBoxx in the event of tampering.

The RFSeal operates on a 2.4GHz RF frequency and is intended to be installed on the container's security hasps using a special high security ISO17712 compliant seal and ISO17712 indicative seal for closed loop logistic.

LogiBoxx Certified TrailerSEAL

The **LogiBoxx Certified TrailerSEAL** is similar to an RFSeal, but it adds GPS and GPRS to the RF technology in the hardware. This means that a TrailerSEAL can communicate with GATIS without the need to connect it to a LogiBoxx. TrailerSEAL both records and transmits location and event information on an hourly basis, as well as sending instant alerts should a container be taken to an unapproved location or if tampering activities are detected.



Although they share a similar form factor, RFSeal requires a LogiBoxx to communicate with GATIS, while a TrailerSEAL can communicate with GATIS directly.

Built on the LogiBoxx platform, The TrailerSEAL padlock is ISO17712 high-security seal compliant for intermodal shipping and ISO17712 indicative seal for closed-loop logistics. TrailerSEAL also leverages GATIS to offer reporting and monitoring functions.

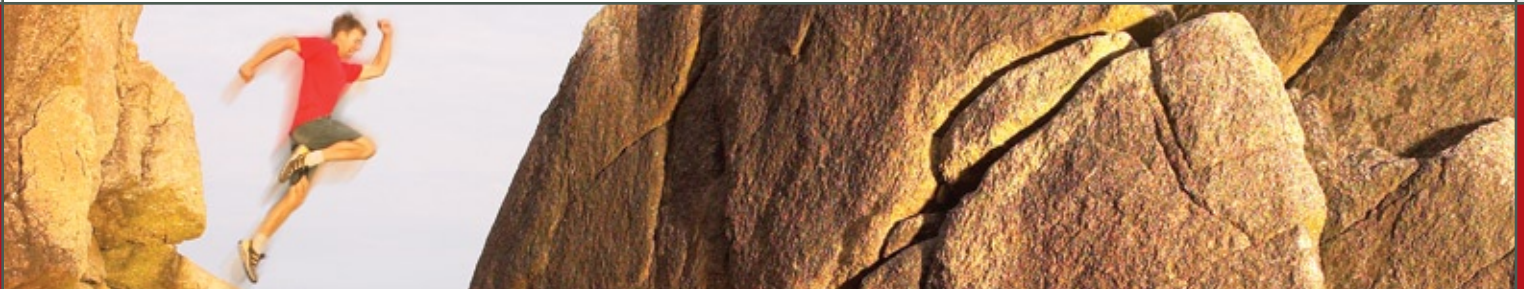
Non-Mechanical Seals

There are a number of **Non-Mechanical Seals** available in a wide variety of form factors. Please consult your LogiBoxx Certified Reseller or direct sales representative for a comprehensive listing of currently available models.

MobileManager

The **MobileManager** is an optional component in a LogiBoxx Certified Solution. It allows operation and control centers to communicate directly with drivers in the field via text messages which are displayed on the device's screen, as well as allowing direct voice communications with the operations center. Given the number of states and countries cracking down on cell-phone usage and text messaging while driving, MobileManager offers a safe and legally compliant way to communicate with field-deployed drivers. The unit offers GPS, GSM and direct satellite communications, and draws power from the vehicle battery as well as containing an internal back up battery.

The standard version uses the GSM network while the S-Series features an automatic toggle between the GSM network and a direct satellite when the GSM network isn't available. The S-series offers an open sky capability, providing unhindered tracking and location services. In addition, both models have 2-way communication in the form of access to telephone, voice and text messaging.



Getting Started

Contact us to learn more about EarthSearch, LogiBoxx and our ecosystem of LogiBoxx Certified Solutions.

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