

1219 Cobham Avenue, Pretoria, 0186 South Africa
+27 (012) 403 0091

AssetSentinel

Protecting assets and equipment using Active RFID

Product Overview

Many case studies have confirmed that asset theft prevention is far more efficient and affordable than attempting to recover assets after they have been stolen. The AssetSentinel solution verifies whether asset movement is authorised, and links assets to associated employees or owners. When unauthorised asset movement is detected, or when an owner is not present when the asset is detected, then an alarm is generated.



Features & Benefits

- Security and theft prevention solution for assets
- Various tag options
- Operates alone standing or can integrate into existing access control systems
- Generates alarms and logs asset movement details
- Detects tag tampering up to 100m
- Locates tags within 3m using tag locators
- Ideal for multi-story buildings

How it works:

- Each owner is issued with an active RFID badge tag with a unique ID number
- Active RFID tags are installed on selected assets. Each asset tag has a unique ID number which is registered on the software together with the details of the asset (brand,model, serial number) and the tag ID number of the owner



- RFID controllers are installed at the exits and throughout the building. These controllers receive the signals from the various active tags. The range of the controller is between 30 and 100m and depends on the building layout. The messages received from tags can contain the following information: tag ID, battery level, tamper alert, movement detection and location ID.
- Locators are installed at entrances and exits of the building. When a tag comes within 2-3 m of a locator, it sends the location ID to the tag. The tag then sends a message to the controller with the tag ID and location ID.
- The application software verifies that the asset movement is authorised and that the associated asset owner is present at the same location as the asset tag. If this is not the case an alarm is generated.
- Tags have a low battery indicator and can have anti-tamper functionality as well. To utilise the anti-tamper functionality the tag signal needs to be detected by a controller

Software Functionality:

- History of asset movement
- Cloud hosted or locally hosted
- Can be integrated with access control systems
- Generates alarms on screen and via e-mail and/or SMS

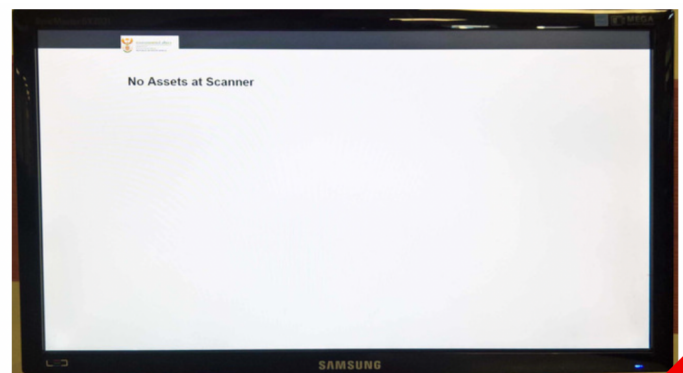
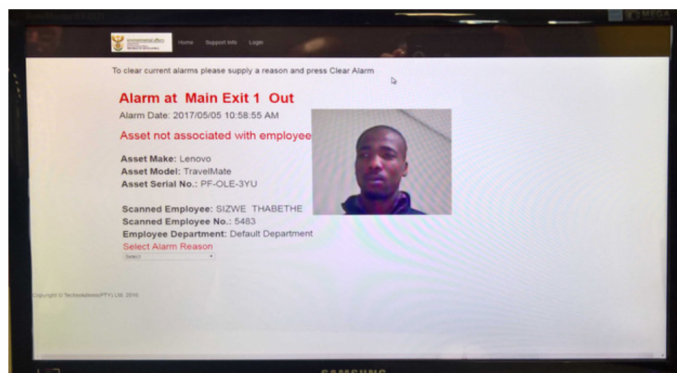


Architecture:

There are three interfaces:

- Asset Registration Interface: used to register assets and personnel, linking assets to personnel and setting alarm conditions
- Asset Alert Interface: Reporting and clearing of alarms. This interface is usually installed in the control room
- Security Point Interface: Displays to security point personnel at entrances and exits the details of assets which created alarms.

Screenshots:



Active vs Passive RFID

- The active RFID technology used in AssetSentinel is unique because it has a location function. Other active RFID technologies and Bluetooth do not have this function which is critical when used as a security system. Without the location function, these systems cannot accurately determine on which floor a tag is located or in which building, when buildings are adjacent.
- Passive RFID technology is not suited for asset protection as the tag can be easily defeated by just holding your hand over the tag. A passive RFID tag can also easily be removed as it does not have a tamper function.

Tag Functionality:

- Various tag formats: laptop tags, asset tags, personnel tags and ATX certified tags
- Battery life: 2 – 5 years
- Low battery signal
- Optional: tamper, movement and locator activated



Controller Functionality:

- Network: Ethernet or WiFi
- Power: 220VAC
- Range: 30 to 100m

Locator Functionality:

- Power: 220VAC
- Range: 2-3 m
- Ceiling or wall mounted

Techsolutions has been providing turnkey RFID solutions since 2005. We also develop, manufacture and support RFID readers, tags and software locally.

Further Information:

<https://www.techsolutions.co.za/rfid-asset-theft-prevention-active>

Contact: sales@techsolutions.co.za