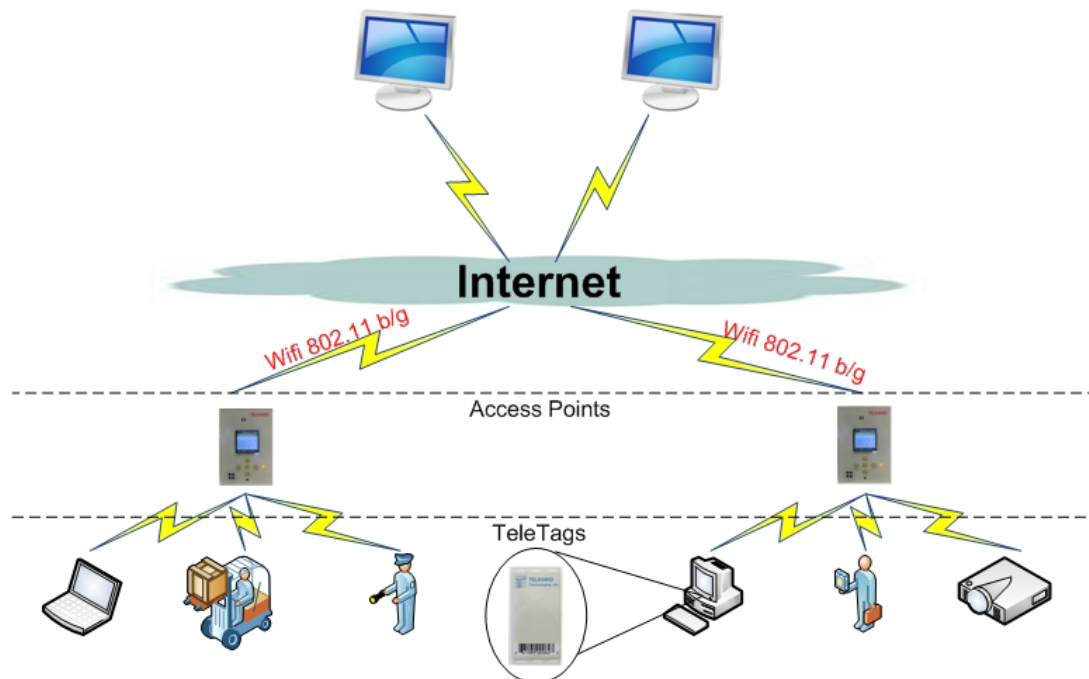


The Shepherd Real Time Locating System (RTLS) is a fully customizable asset and personnel tracking system based on Active RFID technology. At the heart of the system are the lightweight and ultra-thin TeleTags developed and produced by TELEGRID Technologies. These miniature tags are ideally suited for use as employee ID badges or as non-invasive attachments to expensive equipment. Their unique features include a built-in motion detector, temperature sensor, LED and push button alert. The Shepherd RTLS also includes Wi-Fi Access Points designed to provide connectivity to remote tracking stations over the Internet. The system utilizes a web-enabled database which can be integrated into existing processing platforms for cost savings.

The Shepherd Real Time Locating System



Features

- Real time automated tracking and monitoring of assets and personnel
- Miniature Active RFID TeleTags serve as ID badges or as non-invasive attachments to equipment. Tag size is 2.7 x 1.341 x 0.196 inches and weighs only 0.7 ounces
- TeleTags contain a built-in motion detector for added security and asset theft prevention
- TeleTags contain a temperature sensors for environmental monitoring and an LED and push button alert for 2-way system notification
- TeleTags contain replaceable batteries for capital preservation
- Wi-Fi 802.11 b/g Access Points can be easily integrated into existing infrastructure and include color LCD screens, temperature sensors and speakers for audible alerts
- Graphical User Interface (GUI) and searchable web-enabled relational database allow tracking personnel and assets remotely from multiple locations
- Access Points contain signal strength sensors to help locate TeleTags within a structure
- System software is scalable, upgradeable, and can be integrated into existing systems
- System is configurable on-site using existing data

TeleTag Active RFID Tag

The miniature Shepherd TeleTag contains a built-in temperature sensor and motion detector that transmits a message when the tag is being moved. TeleTag is designed for low battery use by altering transmission frequency and message content to reflect changing conditions. The TeleTag also contains a programmable LED, a push button alert to call for help, and a replaceable battery to protect capital investment.



Technical Specifications

RF Transceiver:	2.4 GHz
Dimensions:	2.7 x 1.341 x .196 inches and weighs 0.7 ounces
Range:	50 meters in line of sight
Battery Life:	5.33 years (assuming TX every 30 seconds when stationary, TX every 5 seconds when in motion and 25% motion per year)
RF RX Sensitivity:	-101 to -83 dBm
RF TX Power:	-30 to +1 dBm
RF TX Data Rate:	500 kbps
Motion Detector Sensitivity:	.015G to 0.05G depending on orientation
Operating Temperature:	-25 to 85°C
Battery:	Replaceable CR3032 3V Lithium Coin Cell (500 mAH)

Wi-Fi Access Point

The Shepherd Access Points bridge the System's TeleTags to commercial Wi-Fi routers and to remote tracking stations. Access Points include a programmable color LCD screen to display current status of all TeleTags and other System features. They also contain built-in temperature sensors which can relay information to other systems, such as a Building Automation System. A speaker for audible alert notification is also included in each Access Point.



Technical Specifications

RF Transceiver:	2.4 GHz
Wi-Fi Transceiver:	2.4 GHz IEEE 802.11 b/g
Dimensions:	4 x 2.5 x .8 inches
RF Range:	50 meters in line of sight
RF Receiver Sensitivity:	-101 to -83 dBm
RF TX Power:	-30 to +1 dBm
RF TX Data Rate:	500 kbps
Wi-Fi Range:	120 meters in line of sight
Wi-Fi RX Sensitivity:	-85 dBm
Wi-Fi TX Power:	+18 dBm
Wi-Fi TX Data Rate:	11 Mbps for 802.11b 54 Mbps for 802.11g
Operating Temperature:	-20 to 60°C (limited by battery)
Battery:	Rechargeable 1300mAH BP-5L Lithium Polymer battery (charger included)

TELEGRID Technologies, Inc.
19 Microlab Road
Livingston, NJ 07039
(973) 994-4440
sales@telegrid.com