



## TrekTag® User Guide



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# Introduction to TrekTag®

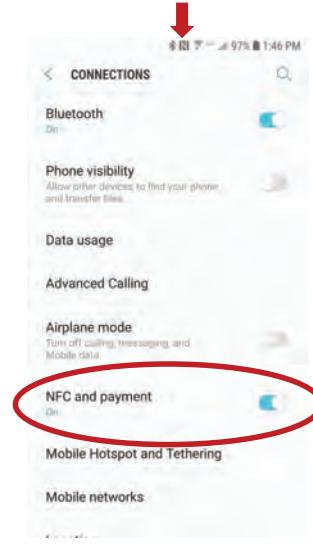
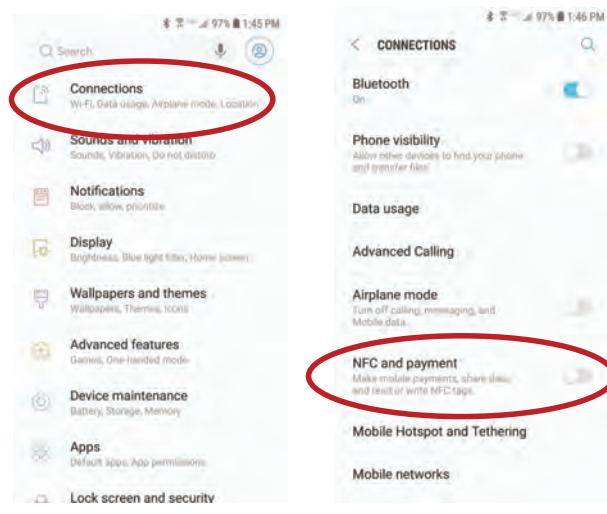
- Graphic Controls is pleased to offer the TrekTag® package, which consists of:
  - TrekTag® NFC – Temperature Data Logger that communicates via NFC.
  - TrekTag® Mobile – Android Mobile Application and User Interface.
  - TrekTag® Analytics – Web Based “cloud” platform for data storage and analysis.
- In order to utilize TrekTag® NFC Temperature Data Logger, the user will need to have the following:
  - NFC-Enabled Android device running version 4.4 or higher.
  - TrekTag Mobile Application [Download the Free App from Google Play here](#)

# Topics Covered

- This User Guide will provide step-by-step instructions on how to:
  - Configure your NFC-Enabled Android device so that the NFC feature is **ON**.
  - Locate the Free App within Google Play and Install on your device.
  - Activate/Deactivate the TrekTag® NFC data logger.
  - Use TrekTag Mobile device application to read & write data to the logger.
  - Transmit/Share data from the application via email.
  - Login to the cloud platform on the mobile application so that data is automatically pushed to TrekTag Analytics.

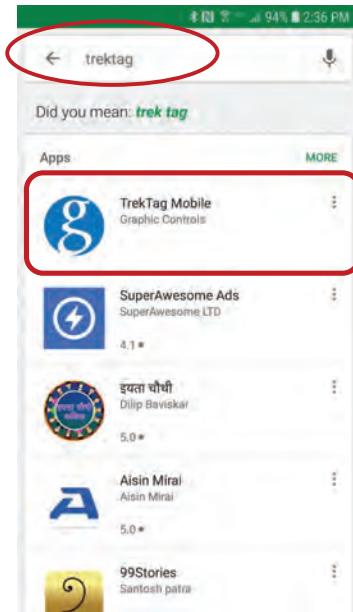
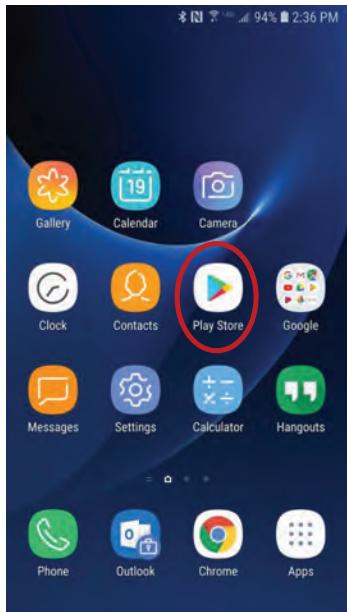
# Configuring your Device

- Enabling Near Field Communication (you must have an NFC-enabled Android device 4.4 or higher).
  - Select **Settings** from the Home Screen
  - Open **Connections** and find **NFC**
  - Toggle NFC to the **ON** position



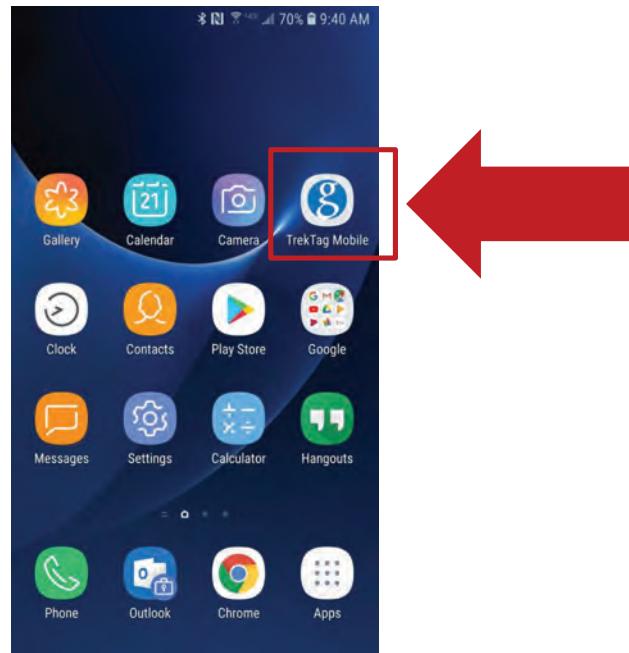
# Install the Mobile App on Your Device

- Download the free Application from [Google Play here](#)



# Using TrekTag® Mobile Application

1. Launch the application from your device.



TrekTag® User Guide

# TrekTag® Mobile Application Settings

2. Open the App features by clicking on the three dots in the upper right.

3. The App Features Menu has *Five* sections.

**I. Account** – This section allows you to login to your TrekTag® Analytics “cloud” account.

- a. Enter your email and password to Login
- b. When properly logged in to your cloud account, the app will display “cloud syncing enabled for [company name]” at the very bottom as show in picture to the right.
- c. Data will automatically be pushed to TrekTag® Analytics for storage and management.

**II. Settings** – Allows you to customize temperature scale and time zone.

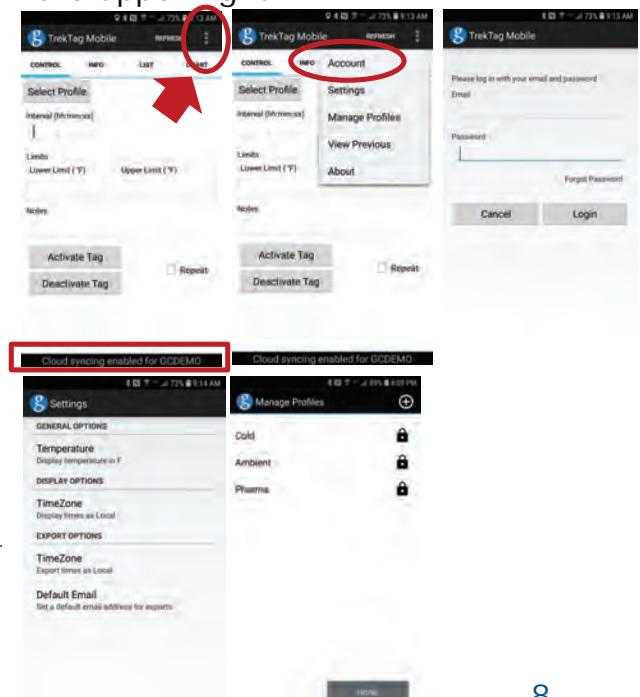
- a. Select Celsius or Fahrenheit temperature scale.
- b. Set the display temperature time stamp as either local time or UTC time.
- c. Choose either local or UTC time stamp for the exported data.
- d. Add a default email address to where the exported data files will be sent.

**III. Manage Profiles**

- a. Use one of the pre-configured profiles or Create your own.
- b. Create up to 3 custom profiles per user.
- c. Designate Profile name, custom recording interval, and upper/lower limit.

**IV. View Previous** – allows you to recall data from the last tag that was read on the device.

**V. About** – Displays the version of the app that is currently loaded onto the device.

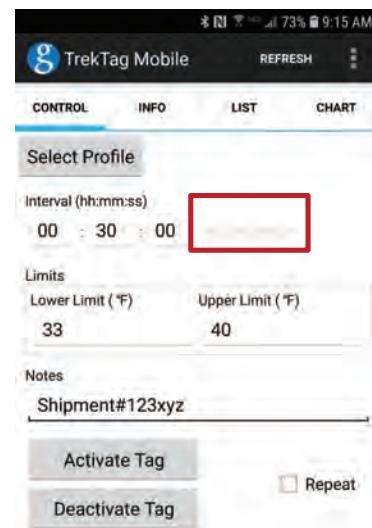


# TrekTag® Mobile Functions

When the app is running there are four main tabs/functions along the top of the screen; **Control, Info, List, Chart**. The app will default to the Info tab when launched.

## 1. Control – this tab is used for activating and deactivating tags.

- a. Set temperature logging interval by either choosing a stored profile or manually entering the desired information.
- b. When the interval is entered, a time is displayed to the right of the interval field. This is the maximum time the TrekTag® will record and save data.
- c. Enter the upper and lower limits that the product should be maintained within.
- d. The notes section will hold up to twenty (20) customizable characters.



# TrekTag® Mobile Functions

## 2. Info – View the status of the tag (active or passive), UID, Logging Info, and Temperature Limits.

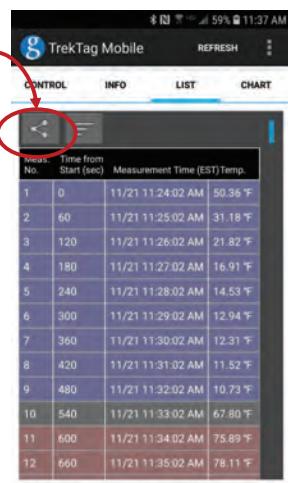
- a. **UID** – Unique Identification Number
  - Each tag comes with a unique factory programmed identification number and *cannot* be changed.
- b. **Currently**
  - Date and Time of last scan
  - Current Battery voltage
  - Status
    - Active – Logger is measuring and recording temperature data
    - Passive – The tag is *not* reading or recording any data.
- c. **Logging**
  - The date and time temperature logging started
  - What the interval is (in seconds) between reading/recording
  - User defined notes section
  - Number of readings captured at the time of last scan
  - The average, maximum, and minimum temperatures recorded
- d. **Limits**
  - Displays the upper and lower temperature limits

# TrekTag® Mobile Functions

## 3. List

- a. Displays time-stamped temperature readings in a table format
- b. Data
  - Grey rows are within the temperature threshold
  - Blue rows are below the temperature threshold limit
  - Red rows have exceeded the temperature limit

- Information can be shared in .csv and .png format



Cloud syncing enabled for GCDEMO

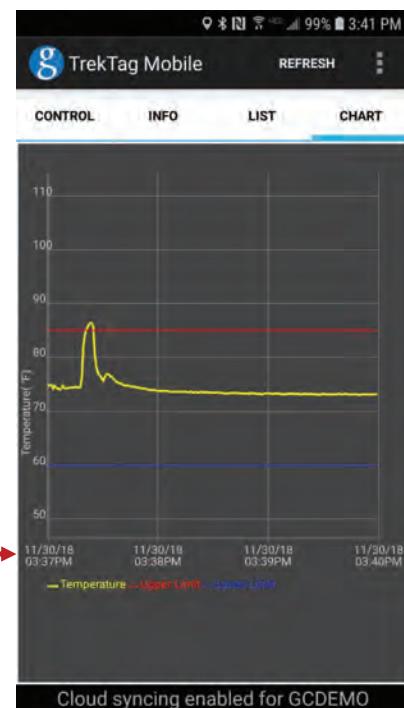
Meas. No.	Time from Start (sec)	Measurement Time (EST)	Temp.
1	0	11/21 11:39:22 AM	63.36 °F
2	60	11/21 11:40:22 AM	35.46 °F
3	120	11/21 11:41:22 AM	76.68 °F
4	180	11/21 11:42:22 AM	77.95 °F
5	240	11/21 11:43:22 AM	80.80 °F
6	300	11/21 11:44:22 AM	77.31 °F
7	360	11/21 11:45:22 AM	70.02 °F
8	420	11/21 11:46:22 AM	68.59 °F
9	480	11/21 11:47:22 AM	67.96 °F
10	540	11/21 11:48:22 AM	67.48 °F
11	600	11/21 11:49:22 AM	67.01 °F
12	660	11/21 11:50:22 AM	67.33 °F

Cloud syncing enabled for GCDEMO

# TrekTag® Mobile Functions

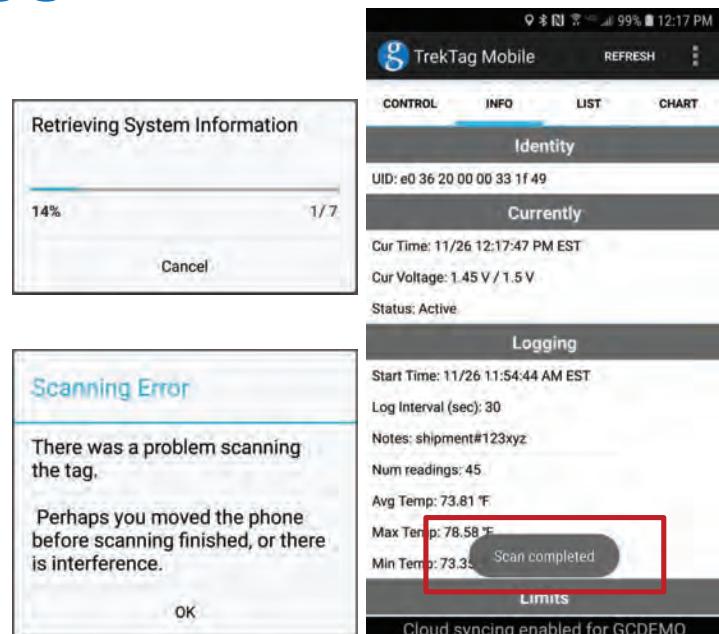
## 4. Chart

- a. Horizontal line graph of temperature over time
- b. Display
  - Red line represents constant upper temperature limit
  - Blue line represents constant lower temperature limit
  - Yellow line represents temperature recorded over time
- c. Zoom functionality to scale down into data
- d. Date and time are along the bottom of graph for quick reference.



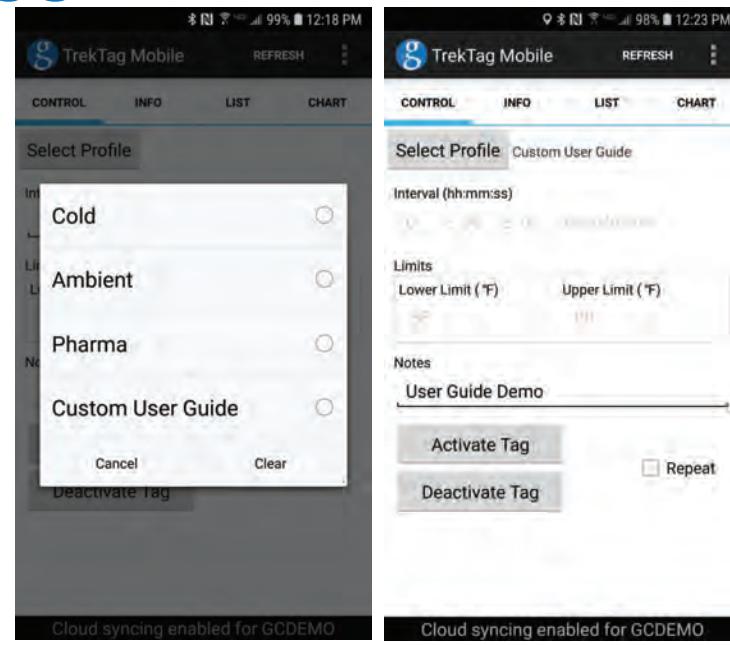
# Activating a TrekTag® NFC Temperature Data Logger

1. Place a TrekTag® NFC Card on your work surface.
2. Launch TrekTag® Mobile app and place your device within one (1) inch of the TrekTag® NFC Data Logger.
3. A **Retrieving System Information** dialog box will appear as the tag is being read by your device.
  - If Successful, a message will appear at the bottom of the screen indicating that the **scan is completed**.
  - If a problem occurs, a **Scanning Error** dialog box will appear. You will need to tap **OK** and re-scan the tag.
4. Keep the device steady and within one (1) inch of the tag while it is being activated. Excess movement during a scan can cause an error and the step will have to be repeated.



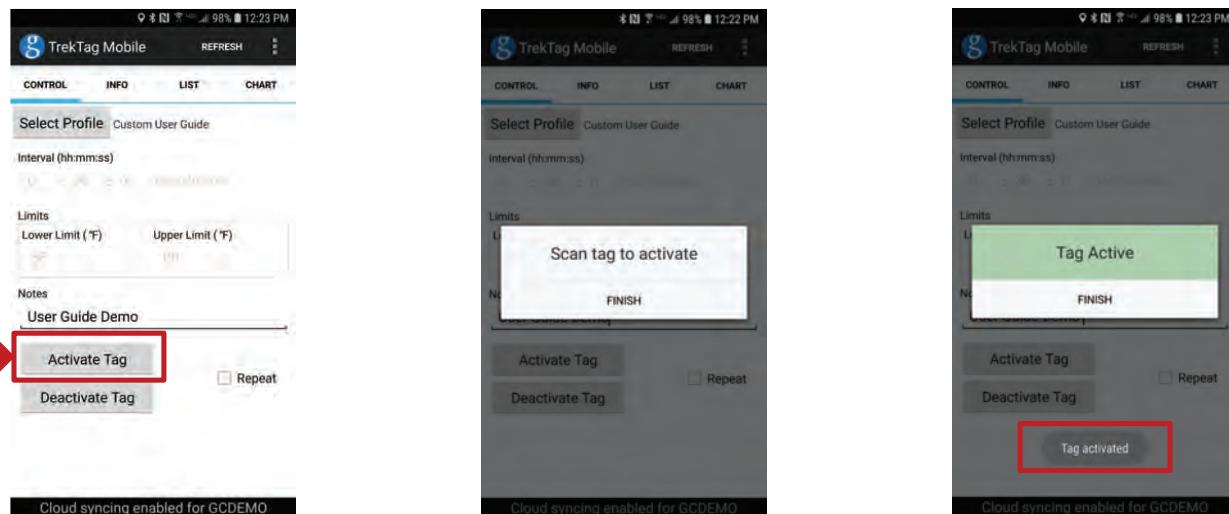
# Activating a TrekTag® NFC Temperature Data Logger

5. Select the **CONTROL** tab at the top of the screen.
  - a. To select a stored product temperature profile.
    - i. Press the **Select Profile** button
    - ii. Choose the desired profile from the menu
    - iii. The input fields will be populated and the name of the profile will appear next to the select profile button.
  - b. To Manually enter logging parameters
    - i. Enter logging interval (hh:mm:ss)
    - ii. Enter desired upper and lower temperature limits
    - iii. Notes field can hold up to 20 user customized characters.
  - c. Press the **Activate Tag** button
    - i. If the **Repeat** box is checked, tags will be activated with the same information.



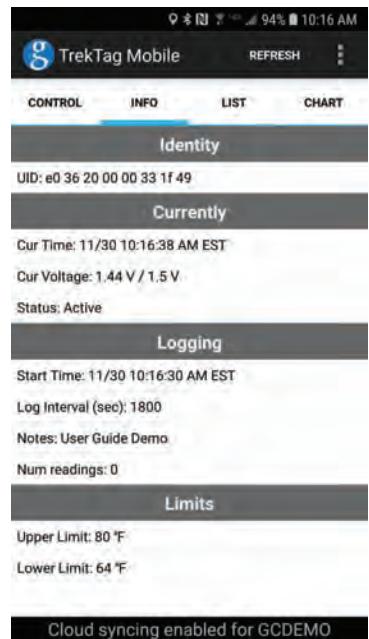
# Activating a TrekTag® NFC Temperature Data Logger

d. A **Tag Active** message will appear on the screen and the temperature data logger will begin to record.



# Activating a TrekTag® NFC Temperature Data Logger

- e. Press **FINISH** to complete the activation process. The data logger is now recording and ready to be used.
- f. To confirm that the logger has been activated as intended, scan the tag, and the **INFO** tab will open. Once the **INFO** tab opens the data parameters can be verified.
- g. Peel the backing paper off of the tag and apply to the product or area you want to record temperature (e.g. cartons, pallets, cooler wall, climate controlled room, processing areas, transport container, etc...)



# Logging Temperature Data

1. The TrekTag® NFC temperature data logger will store a maximum of 800 data points.
2. The tag will continue to record and store data at the programmed interval until the tag's memory is full or the unit is deactivated.
3. The number of readings and tag status can be viewed from the **INFO** tab.

The image displays two screenshots of the TrekTag Mobile app. The left screenshot shows the 'INFO' tab, which displays the following data:

- Identity: UID: e0 36 20 00 00 33 1f 49
- Currently: Cur Time: 11/30 10:42:40 AM EST, Cur Voltage: 1.44 V / 1.5 V, Status: Active
- Logging: Start Time: 11/30 10:26:05 AM EST, Log Interval (sec): 1, Notes: User Guide Demo, Num readings: 800 (highlighted with a red box), Avg Temp: 75.48 °F, Max Temp: 98.40 °F, Min Temp: 74.46 °F
- Limits: Cloud syncing enabled for GCDEMO

A red arrow points from the word 'FULL' to the 'Num readings: 800' field. The right screenshot shows the 'Control' tab, which includes:

- Select Profile: Custom User Guide
- Interval (hh:mm:ss): 00:00:00
- Limits: Cloud syncing enabled for GCDEMO
- Buttons: Tag Passive, FINISH, Activate Tag, Deactivate Tag, Tag deactivated (highlighted with a red box), and Repeat

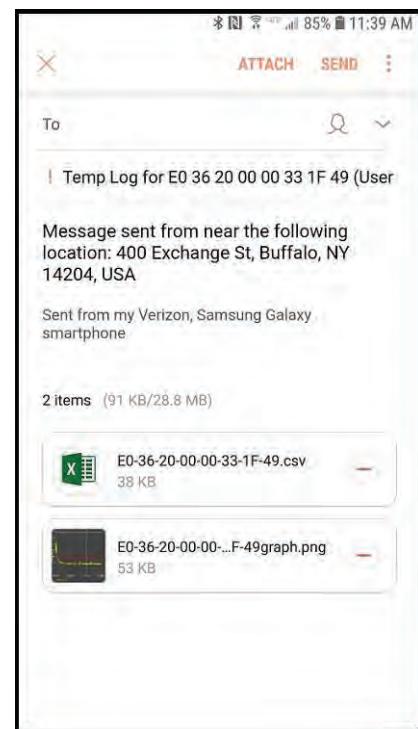
# Reading TrekTag® NFC

1. TrekTag® NFC can be read via NFC-enabled Android device at any time during the data logging process. If logged into your TrekTag® Analytics account, the data will then automatically be pushed to the “cloud”.
2. Launch the application and place the device within one (1) inch of the tag to read and retrieve the data.
3. Do not move the device until you see a message near the bottom of the screen that says **Scan Completed**.
4. Once the data has been retrieved, you can move your device away from the tag and review the data via various tabs within the application (i.e. INFO, LIST, CHART).



# Sharing Data from the App

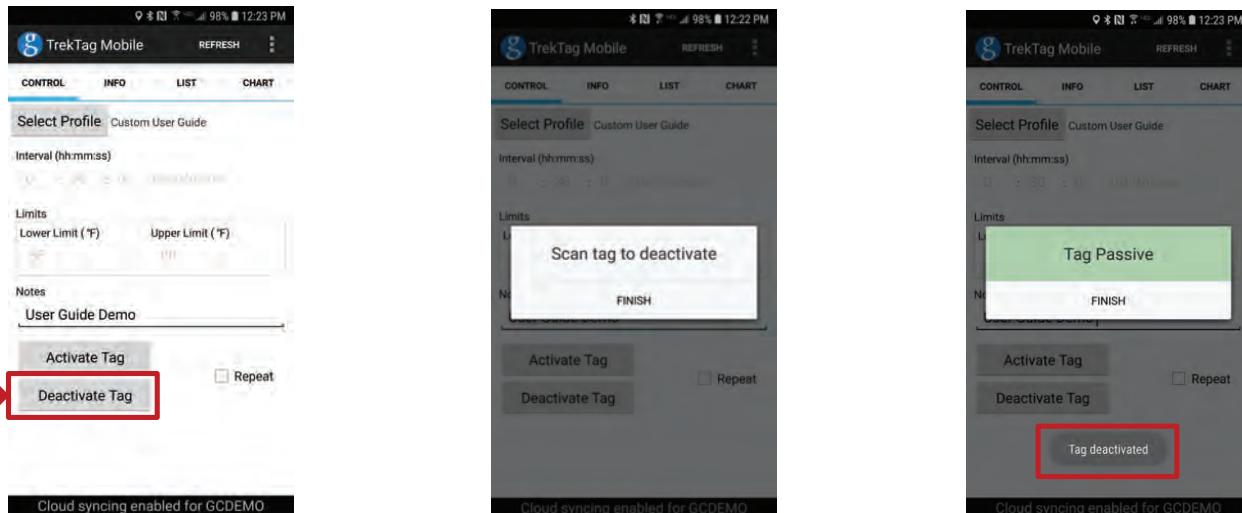
1. After reading a tag, select the **LIST** tab.
2. Select the sharing icon 
3. An email is generated with the data in .csv file format and a graphical image of the data. The email will also include a message with the location of sending device (if enabled).
4. Send the data to the appropriate receiving parties.



# Deactivating a TrekTag® NFC Temperature Data Logger

1. When you are done recording temperature, you can deactivate or stop the TrekTag® NFC Temperature Data Logger.
2. Launch the TrekTag® Mobile application and move your device to within One (1) inch of the tag that is to be deactivated.
3. Select the **CONTROL** tab at the top of the screen.
4. Select the **DEACTIVATE TAG** button.
5. Do move the device until you see the **TAG PASSIVE/TAG DEACTIVATED** messages. These messages confirm that the data logging has been stopped. Press Finish to complete the process.
6. The Temperature data that was recorded is stored on the TrekTag® NFC label.
7. **NOTE:** If a user reactivates a previously used tag then the tag will clear and overwrite stored data.

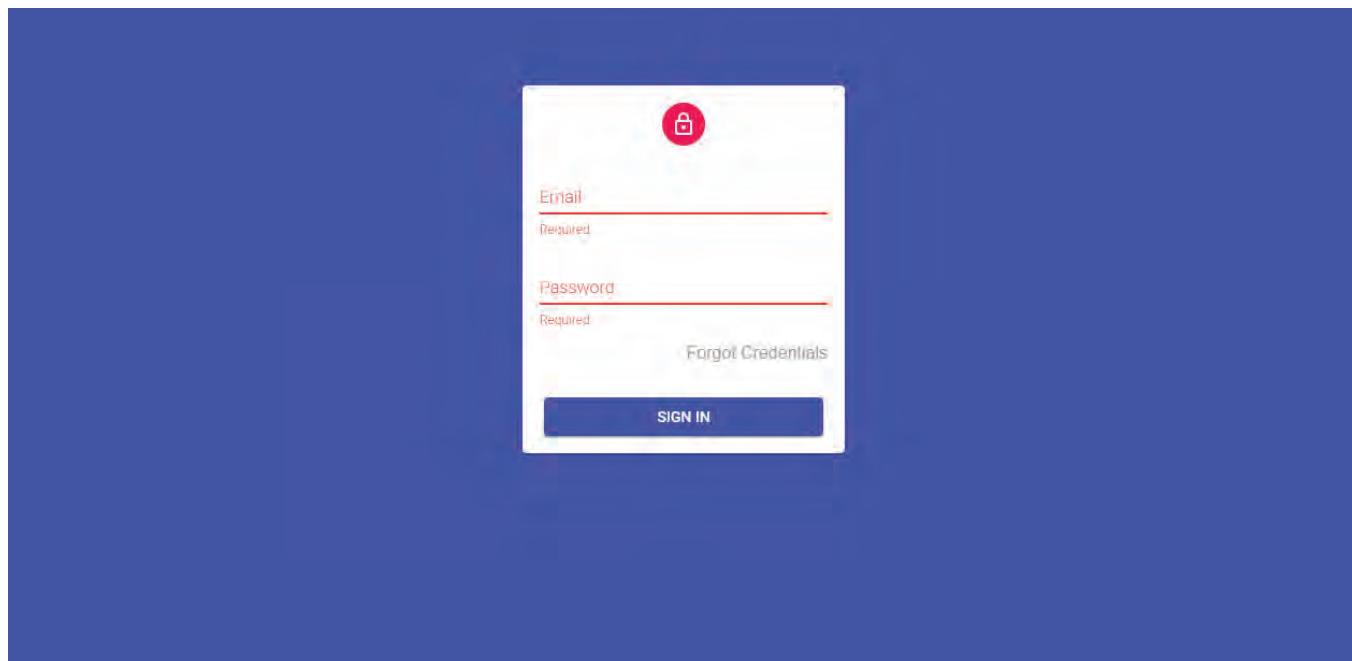
# Deactivating a TrekTag® NFC Temperature Data Logger



# TrekTag® Analytics “The Cloud”

1. Please provide the user's first/last name, email address, and company name. Once a company Administrator has been established, they will be able to add other users to the company account.
2. Enter your email and password and **SIGN IN**
3. If you have an account, but forgot your password, select **FORGOT CREDENTIALS**, and you will be able to reset your password to enter the site.

# TrekTag® Analytics Login Screen



# TrekTag® Analytics Dashboard Example

