Parsyl Trek Tab User Guide

2021

The Trek Tab

Product Sheet

Basic specifications of Trek Tab device

User Guide

Shipments
Configuration Settings

Product Overview

Sensors

	Temperature
Normal Operating Range	-30°C to +55°C
Sensing Range	-30°C to +70°C
Accuracy	±0.3°C to ±0.4°C
Resolution	0.01°C
Calibration	NIST Traceable, ISO/IEC 17025 certified

Enclosures

|	
Dimensions	51mm x 26mm x 5.3mm
Weight	9g
Battery	100 days of active logging at 0°C, 24-month shelf life at 20°C
Material	Polycarbonate + ABS
Humidity	0% - 95% RH (Storage, Operating, Transport)
Ingress Protection	IP67-rated. Water and dust resistant.
Status Indicators	Bright LED lights indicate status of device and monitoring.

Wireless Connectivity

Bluetooth Low Energy (BLE) 5.0 - 2.4GHz, Class 2.

Warranty

The product is covered by a one year warranty in the event of any component failure not caused by mechanical damage.

User Guide
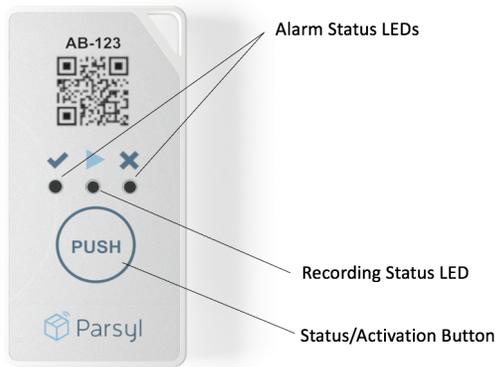
Status button, LED Display

The Trek Tab LED display utilizes indicator lights in green or red in varying patterns to indicate status.

The center LED indicates the recording status. A flashing green LED after a single short button press indicates that the Trek Tab is actively recording.

The left [✔] LED indicates with a flashing green LED after a single short button press that the Trek Tab has not experienced conditions that exceed any of the threshold alarm settings. If the button is pressed while the TrekTab is actively recording, the [✔] LED will flash in sequence after the center LED flashing green.

The right [✖] LED indicates with a flashing red LED after a single short button press when the Trek Tab has experienced at least one instance of conditions exceeding at least one of the threshold alarm settings. If the button is pressed while the Trek Tab is actively recording, the right [✖] LED will flash in sequence after the center LED flashing green.
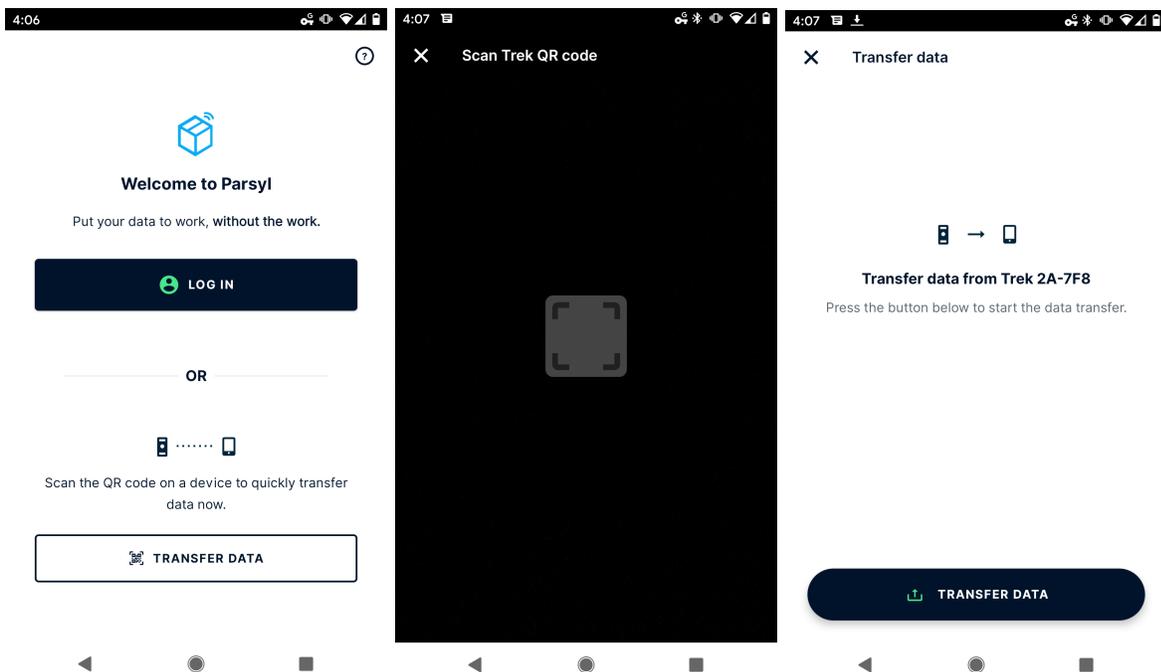
Shipments

To activate the Trek Tab device to track a shipment, press and hold the 'Push' button for 3-seconds until the center LED flashes green. Depending on your shipping profile settings, there may be a delay after the unit is activated until it begins recording.

To stop recording, press and hold the 'Push' button until the center LED flashes red. **Note:** The Trek Tab is intended to be a single use device. Once recording has been stopped it cannot be restarted.

To conserve battery power, after the Trek Tab has stopped recording, it will stop BLE advertising after prolonged periods without user interaction. Users can re-initiate BLE advertisements from this low-power state with a single short press of the 'Push' button.

Data Transfer

In order to access the data recorded on the Trek Tab, it will need to be offloaded by a Gateway or the Parsyl Mobile App. To offload data with the app, start by logging in or selecting **Transfer Data**.

To view the Trek Tab data and analyze findings, log into the Parsyl Web Application and select the appropriate Shipment from the list within your Company to view the details.

Configuration Settings

Excursions

An excursion is defined as any time spent outside of "expected ranges" when monitoring your products. Excursion thresholds are defined by your specific needs and set by creating upper and lower limits of temperature.

Options for excursions

Within our excursion settings, you have two options for tracking the excursions recorded by our Treks:

- **Cumulative** excursions will sum all of the time your Trek Tab records values outside the predetermined range, even if those values temporarily enter back into normal range during the Trek Tab's journey. Optionally, the Trek Tab can be reset once the alarm has been breached or the device has been turned off.
- **Continuous** excursions occur only when the readings from your Trek are outside the predetermined range, continuously, for a specified amount of time. The timer becomes reset upon detecting that readings have returned to "normal" or "expected" ranges.

Alerts

The Trek Tab can be configured to display and record varying alert "levels" given certain values and threshold conditions.

There are three (optional) severity levels that can be customized to your preferred workflow and procedure requirements:

- **Info:** normal, or expected recordings for data points logged by the Trek Tab.
- **Warning:** "concerning" recordings for data points logged by the Trek Tab.
- **Alarm:** "high-level of concern" recordings for data points logged by the Trek Tab.

Note: Only alarm and normal conditions are indicated by the LEDs of the TrekTab. Warning conditions are accessible by means of mobile and web interfaces.

Customizations

Within each alert type, the behavior requested when each severity threshold is met can be customized to your desire. Settings that are customizable for displaying alarms on the Trek Tab include:

- Alarm threshold settings
- Logging start delay

Please note that no action is required from the user to ensure uninterrupted use of the device during electromagnetic disturbance.

The Android App

User Guide
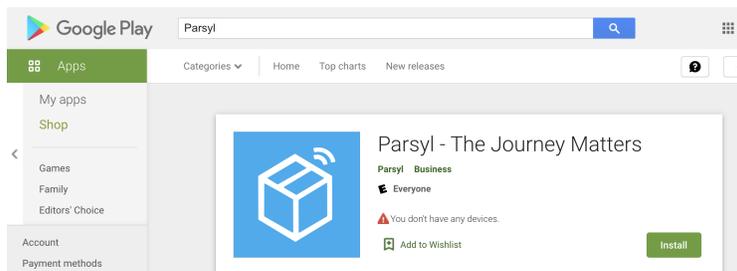
Getting Started
Shipments
Settings

The Android App

User Guide

Getting Started

Before you begin, you must have a Parsyl account with appropriate permissions to access the Android App experience for your company's Parsyl account.

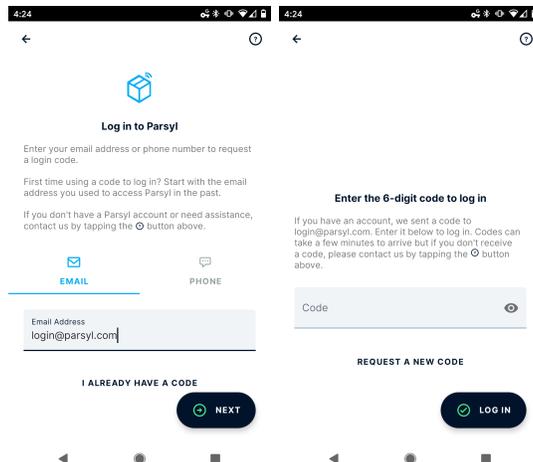Download the Parsyl Android App from the Google Play store, here.

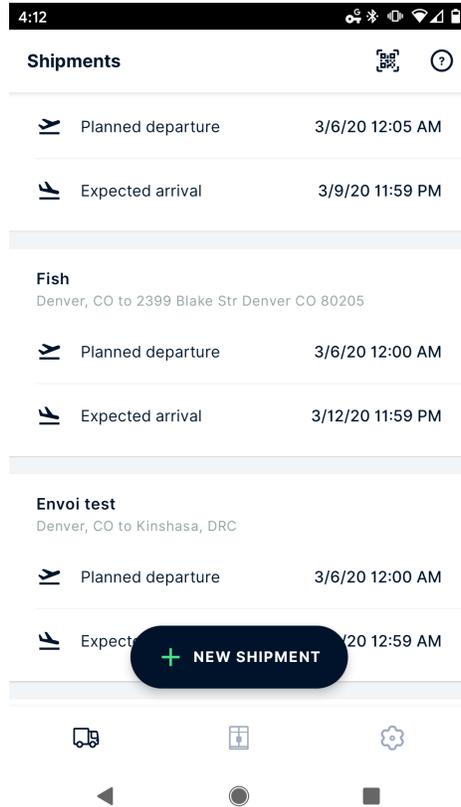Once the download is complete, open the Parsyl App from your Android phone.

Log in by entering your email address or phone number and entering the login code we send you.

Shipments

The Shipments section of the Android app is reserved for the monitoring and analyzing of shipment data recorded by the Trek Tab during its journey.


Trek Details Screen

Upon scanning the QR code of a Trek Tab, from the Shipments section within the Mobile App, you will be taken to the Trek Details screen.

This screen provides an example of the details of the shipment including at least one time-temperature limit violation for each alarm type including the first time-temperature-violation of high and low temperature alarms.

The *Trek Details* screen highlights the current reading for the given Trek Tab, other details about the Trek Tab including its Product Type, Mode and total monitoring time for that shipment.
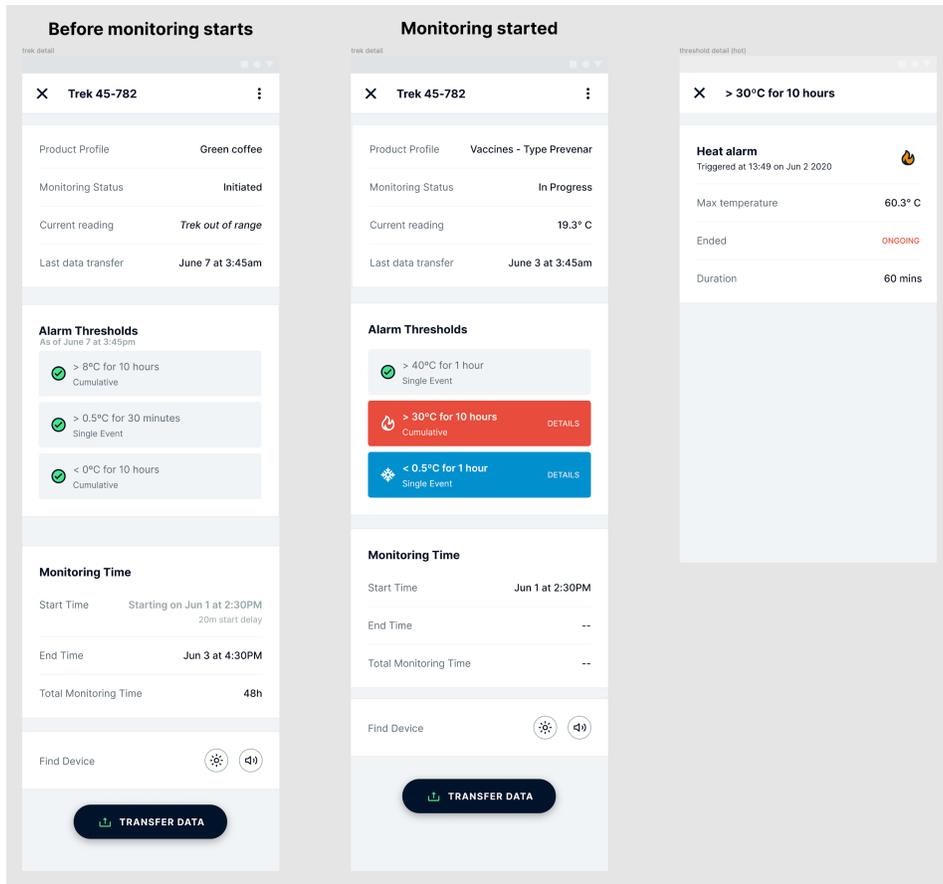
At the conclusion of a shipment, tap **Transfer Data** to transfer the data collected from the Trek Tab device to the Parsyl Web Application for further analysis.

Settings

Mobile App Usage Settings

From the Parsyl Android App, you have a number of optional settings to enhance the Parsyl experience including updates and customizations within your phone's Data Transfer settings, Bluetooth settings and Location settings.

For more discussion around how these settings can compliment your specific workflow, please reach out to support@parsyl.com and we are happy to help.

The Web Application

User Guide

Getting Started
Shipments

User Guide

Getting Started

The Web Application can be accessed from the following url: https://app.parsyl.com

Before a user can log into the system, they must have an account in the Parsyl Platform where they will be assigned to your Company and given appropriate permissions to the system.

There are two permissions options within the Parsyl platform:
- Web app users are allowed to access and work within the Web Application
- Mobile app users are allowed to scan Treks, offload data and access your Company's information via the Android App.

When registering your team with Parsyl, users can have one or both of these permission sets based on your unique workflow and security processes.

Once you have been registered in the Parsyl platform, you will navigate to app.parsyl.com and login. *For assistance logging in, please email support@parsyl.com.*

Similar to the Android App experience, the Parsyl Web Application is organized into two main sections: **Shipments** and **Assets**.

	Assets	Shipments			Webs shipping co	Account Settings ⌄

Overview

 + CREATE SHIPMENT

Total shipments	Shipments w/ excursions
123	**50%**

Shipments

All origins ⌄	All destinations ⌄	All goods ⌄	📅 Departure date	📅 Arrival date

Name ⇕	Origin ⇕	Destination ⇕	Goods ⇕	Anticipated Departure ⬇	Anticipated Arrival ⇕	Alarms Detected
test ship dec pt 2	Warehouse A	Warehouse E	--	1 Dec 2020	23 Dec 2020	
new test ship dec1	Warehouse D	Warehouse Q	--	1 Dec 2020	8 Dec 2020	
new ship nov 30 pt 3	Warehouse D	Warehouse G	--	30 Nov 2020	3 Dec 2020	

Product profile configuration

The product profile allows administrators to choose settings that fit their specific use case. Selecting profiles is an infrequent task, primarily done at initial account setup and onboarding.

Under the *General* section of the product profile, users can identify which type of insights they would like to record during the logging period (**Note:** While the options still appear, the Trek Tab does not support humidity, shock, light or GPS reporting and will ignore these settings). Additionally, users can opt to prevent users from manually or accidentally turning off the TrekTab by selecting to 'Ignore Trek Switch off Events'.

Update Product Profile

Configuration	^
General	
Advertisement	
Severity	
Temperature and Humidity	
Light	
Thresholds	

General

* Profile Name	Test Profile
* Company	a42e4f82-5272-11ea-a0 ∨
Log Temperature	●
Log Humidity	●
Log Shock	○
Log Light	●
Log GPS	○
Ignore Trek Switch Off Events	○

The product profile also allows users to program multiple thresholds to fit their specific needs. The customizable thresholds include:

- Logging interval for temperature.
- Upper and lower warnings, alarms and alarm time delays (duration) at any temperature in the operating range.
- Duration of time delay before alarm or warning is triggered.
- Type of excursion delay: cumulative or continuous.

Update Product Profile   ✕

Configuration   ⌄

    General   * Company [Slackert Co.   ⌄]

    Severity   **Severity**

    Temperature and Humidity

    Light | | Severity | LED Color | LED Pattern | Buzzer | Buzzer Pattern |
Thresholds |---|---|---|---|---|---|
                                     | ☰ | Info | [Green ⌄] | [0 ⌄] | ⚪◯ | [0 ⌄] |
                                     | ☰ | Warning | [Yellow ⌄] | [2 ⌄] | ◯⚫ | [1 ⌄] |
                                     | ☰ | Alarm | [Red ⌄] | [3 ⌄] | ⚪◯ | [3 ⌄] |

                                     Temperature and Humidity

                                     Temperature and Humidity Interval (min)   [−] 10 [+]

                                     Light

                                     Sensor Interval (min)   [−] 30 [+]

[Simple] [Advanced]   **UPDATE PRODUCT PROFILE**   CANCEL

Update Product Profile   ✕

Configuration   ⌄

    General | | | Type | Limit | Threshold Value (Metric) | Severity | Duration Type | Duration (ms) | Actions |
    Severity |---|---|---|---|---|---|---|---|---|
    Temperature and Humidity | ☰ | 1 | [Temperature ⌄] | [Upper Limit ⌄] | [−] 23.9 [+] | [Alarm ⌄] | [Cumulative ⌄] | [−] 1000 [+] | ✕ |
    Light | ☰ | 2 | [Temperature ⌄] | [Lower Limit ⌄] | [−] 21.1 [+] | [Alarm ⌄] | [Cumulative ⌄] | [−] 1000 [+] | ✕ |
Thresholds | ☰ | 3 | [Light ⌄] | [Upper Limit ⌄] | [−] 50.0 [+] | [Warning ⌄] | [Cumulative ⌄] | [−] 0 [+] | ✕ |
                    | ☰ | 4 | [Light ⌄] | [Lower Limit ⌄] | [−] 20.0 [+] | [Warning ⌄] | [Cumulative ⌄] | [−] 0 [+] | ✕ |
                    | ☰ | 5 | [Shock ⌄] | [Upper Limit ⌄] | [−] 5.0 [+] | [Info ⌄] | [Cumulative ⌄] | [−] 100 [+] | ✕ |
                    | ☰ | 6 | [Shock ⌄] | [Lower Limit ⌄] | [−] 0.0 [+] | [Info ⌄] | [Cumulative ⌄] | [−] 100 [+] | ✕ |
                    | ☰ | 7 | [Humidity ⌄] | [Upper Limit ⌄] | [−] 0.0 [+] | [Info ⌄] | [Continuous ⌄] | [−] 0 [+] | ✕ |
                    | ☰ | 8 | [Humidity ⌄] | [Upper Limit ⌄] | [−] 0.0 [+] | [Info ⌄] | [Continuous ⌄] | [−] 0 [+] | ✕ |

                                         (Create Threshold)

[Simple] [Advanced]   **UPDATE PRODUCT PROFILE**   CANCEL

Shipments

Types of Shipments

The Parsyl platform supports two variations on Shipment tracking to better support our customer needs.

- **Manual Shipments** - planned shipments allow the user to input more specific details about their shipment, and plan for them ahead of the shipment date if they wish to use Parsyl to organize their orders and upcoming deliveries.
- **Automatic Shipments -** quick shipments do not have the same planning and scheduling options as the planned shipments feature and are more appropriate for unplanned, quick trips that need tracking and monitoring throughout.

Manual Shipments

If your organization is utilizing the Manual Shipments feature, when you log into the Parsyl Web app, and navigate to the Shipments options in the menu, you will see Shipments overview page with options to view quick stats about all of your shipments in the system, along with a filterable or sortable list to view all shipments.

Column definitions:
- **Name**: user created name for the shipment
- **Origin**: the departure destination, selected by the user
- **Destination**: the intended arrival destination, selected by the user
- **Goods**: the type of goods or items being shipped
- **Anticipated departure**: date of departure from origin, input by the user
- **Anticipated arrival**: date of arrival to destination, input by the user
- **Cumulative Excursion Duration**: the total amount of time an excursion was detected during the shipment, based on the logging ranges and intervals set by the user

From the list view, you can sort and search available shipments to find a particular shipment you're interested in viewing.

By clicking a given shipment, you will be taken to the *Shipment Details* page which shows more granular recordings and events from the shipment, including all configured variables recorded for the shipment in a line graph display.
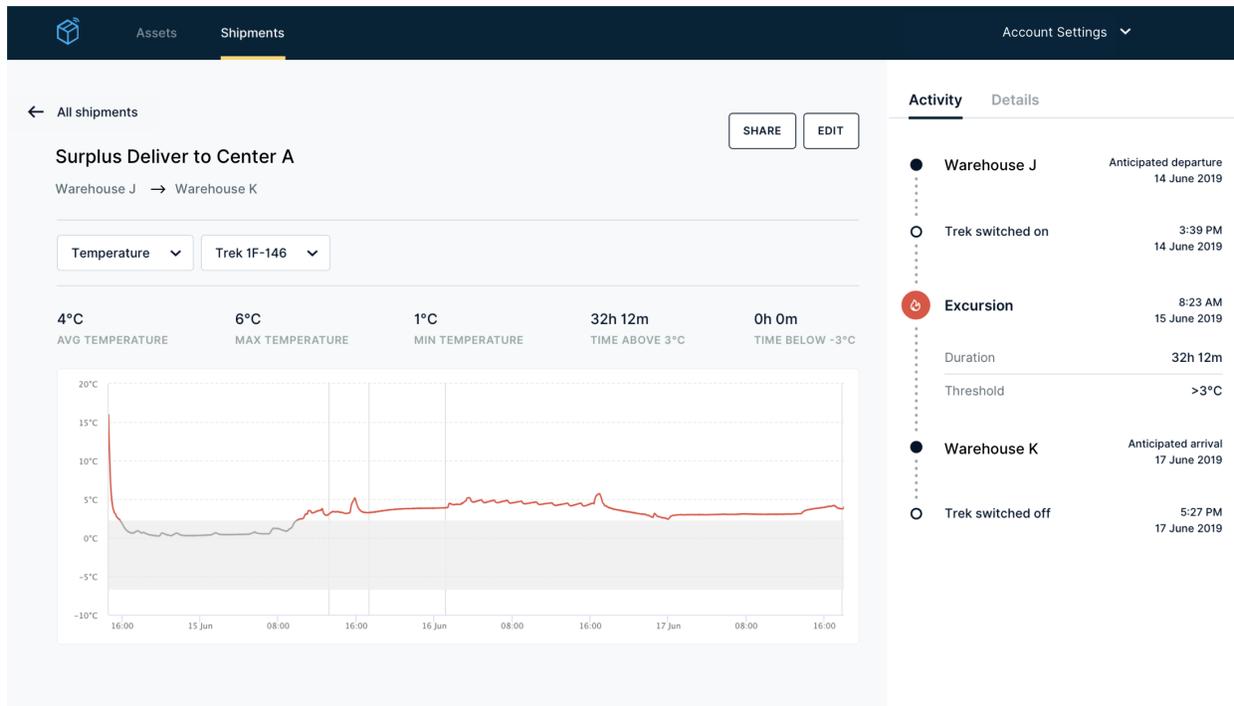
You can see your shipment data overlaid on top of your expected ranges (shown in grey) as an option for your graph display. Additionally, all thresholds breached in transit are listed as excursions in the Activity Feed on the right-hand side of the screen.

Users can also see basic overviews of the shipment statistics such as *Max/Min/Average Temperatures, Time Above and Below Threshold* etc. And they have the option to filter their graph to learn more about specific time periods during transit. Users also have the option to download the data collected during transit via the 'Download CSV' icon in the top right corner of the shipment details screen.

⬇ Download CSV

Lastly, users always have access to their threshold and logger settings through the display of the graph, Activity feed and Details tab on the right-hand side of the screen.

Automatic Shipments

If your organization is utilizing the Automatic Shipments feature, when you log into the Parsyl Web app, and navigate to *Shipments* in the main menu, you will see all data recorded and offloaded from Treks used in quick, unplanned shipments, sorted by the most recent.

Column definitions:
- **Name**: auto-generated name of the shipment that combines the friendly name of the Trek, the TrekID and the date the shipment began
- **Treks**: the TrekID used to track the shipment
- **Start**: the date/time the Trek was switched **to monitor** and began the shipment
- **End**: the date/time the Trek was switched **to standby** to end the shipment
- **Duration**: total time the Trek was monitoring the shipment from "start" to "end"

From the list view, you can sort and search available shipments to find a particular shipment you're interested in viewing.

By clicking a given shipment, you will be taken to the *Shipment Details* page which shows more granular recordings and events from the shipment, including all configured variables recorded for the shipment in a line graph display. Users also have the option to download the data collected during transit via the 'Download CSV' icon in the top right corner of the shipment details screen.
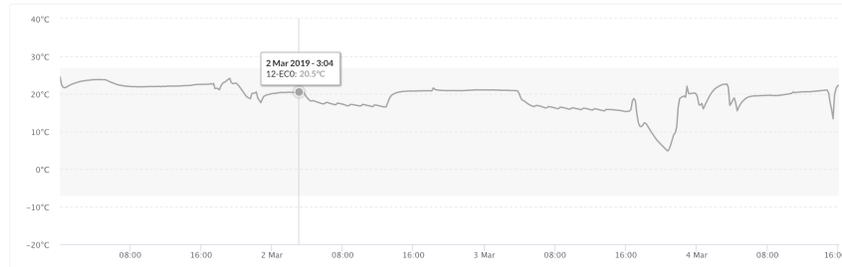
You can see your shipment data overlaid on top of your expected ranges (shown in grey) as an option for your graph display.

12-EC0 2.02.00 03-01-2019 00:04:47 (Auto)

Filter by: 2019-02-28   To   2019-03-04

Temperature °C

2 Mar 2019 - 3:04
12-EC0: 20.5°C

Humidity % rH

By hovering your mouse or cursor over the graph data, you will see a hover display that shows the date, time and variable recording for that moment along the graph.

When viewing the graph, click and drag your mouse or cursor over a section of the graph you wish to "zoom" into.

12-EC0 2.02.00 03-01-2019 00:04:47 (Auto)

Filter by: 2019-02-28   To   2019-03-04
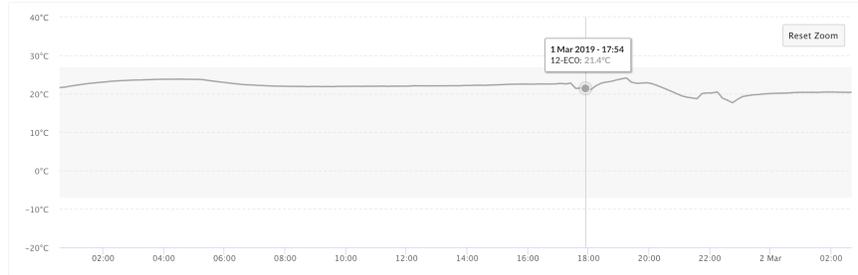
Temperature °C

2 Mar 2019 - 2:34
12-EC0: 20.4°C

Humidity % rH

The axis of the graph will automatically adjust as you zoom. To reset your view of the graph data, click **Reset Zoom.**

12-EC0 2.02.00 03-01-2019 00:04:47 (Auto)

Filter by: ▤ 2019-02-28 To 2019-03-04

Temperature °C

**Humidity % rH**

Gateway

User Guide

About
Implementation

User Guide

About

Our Gateway solution offers seamless data monitoring capabilities by automatically uploading Trek data when a Trek Tab is in range.

As Trek tabs pass within range, the Gateway will automatically transfer Trek Tab data to your account. The Gateway will continue monitoring the Treks consistently, as long as they are within range, whether they are packed in a shipment or not.
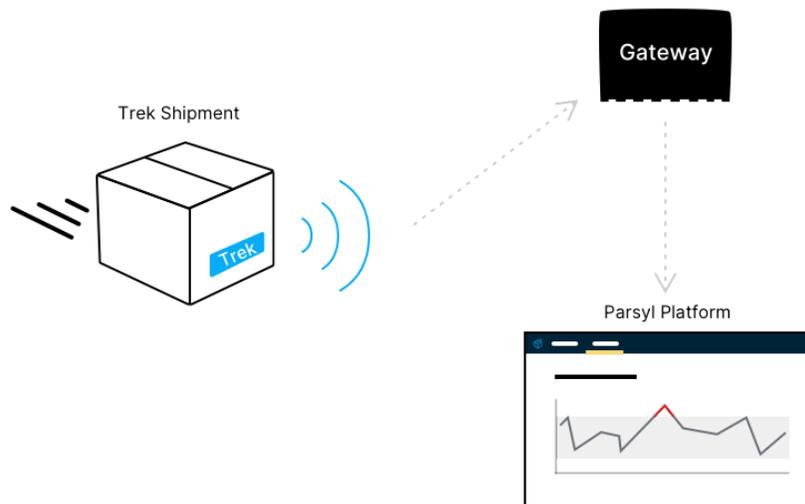
Implementation

To install a gateway device, mount or place the gateway in a location nearest your anticipated Trek tab locations (ie: the receiving bay, in your loading dock etc.).

Your gateway works best when it's near a strong internet connection. Placing the gateway in a location that allows for a strong WiFi connection or an easy plug-in to your network will help ensure you get the best experience from your gateway.

To get started, you'll first ensure the gateway is unplugged and check that the antenna is screwed into the port on the gateway case. This will help maximize the range accessible by the gateway.

Next, select an adaptor to match whichever outlet style you have and plug into the outlet to supply power to your gateway.

To finish your setup, connect the gateway to your network with the options listed below. In order of most preferred options to deliver the best experience, please attempt the connection in the following order:
1) Ethernet connection
2) WiFi connection
3) Cellular connection

You can also connect your gateway to the Internet using more than one option listed below (such as Ethernet *and* WiFi). If you would like to set-up a WiFi connection, in addition to the Ethernet connection, follow the WiFi installation steps first, before plugging in the Ethernet cable.

The gateway is programmed to use redundant Internet connections when available to increase reliability.

Ethernet

Parsyl recommends using this option as a connection to the Internet, because it does not rely on wireless reception. Parsyl is happy to discuss all security and set up options with your network administrator to ensure the gateway is installed properly. To schedule a call with our Parsyl support team, email **support@parsyl.com**

To connect the gateway using Ethernet, plug the Ethernet cable into the gateway's port.

WiFi

This connection type is usually faster and cheaper than the cell connection option. It may also be more reliable, depending on your connectivity. If you're setting up WiFi, make sure you don't have an Ethernet cable plugged in and we will get this set up in the next step.

To connect the gateway using WiFi:
- Ensure your Ethernet cable is **not** plugged into the gateway before proceeding.
- Using a mobile phone or laptop, connect to the "Parsyl Gateway" network. This network is created by the gateway and allows you to configure it, from your device.

- Once you are connected, you will be shown a WiFi configuration notification.
- Once the configuration screen is showing, select the name of the WiFi network you want to use for the gateway connection.
- If applicable, enter your password for the given network.
- Finally, select **Connect**

The gateway will restart and connect to the network using the password you specified. If you are also using an Ethernet connection, feel free to plug the Ethernet cable in at this time.

Cellular

In circumstances where network connectivity is not available for use, Parsyl can work with you to utilize a cellular connection to run your gateway product.

If you are interested in learning more about this option, please contact Parsyl Support to schedule a consultation: **support@parsyl.com**

Safety and Certification

US - FCC

Canada - IC

European Union - CE, RED
RED Declaration of Conformity (DOC)

US - FCC

Product name: Trek Tab Temperature Data logger

Model name: TREKC1
Model name: TREKC2

FCC ID: 2AQ8LTREKC1
FCC ID: 2AQ8LTREKC2

This device complies with Part 15 of the FCC Rules. Operation is subject to the following two conditions: (1) this device may not cause harmful interference, and (2) this device must accept any interference received, including interference that may cause undesired operation.

Changes or modifications not expressly approved by the party responsible for compliance could void the user's authority to operate the equipment. This device complies with FCC radiation exposure limits set forth for an uncontrolled environment. In order to avoid the possibility of exceeding the FCC radio frequency exposure limits, human proximity to the antenna shall not be less than 20cm (8 inches) during normal operation.

Note: This equipment has been tested and found to comply with the limits for a Class B digital device, pursuant to Part 15 of the FCC rules. These limits are designed to provide reasonable protection against harmful interference in a residential installation. This equipment generates, uses and can radiate radio frequency energy and, if not installed and used in accordance with the instructions, may cause harmful interference to radio communications. However there is no guarantee that interference will not occur in a particular installation. If this equipment does cause harmful interference to radio or television reception, which can be determined by turning the equipment off and on, the user is encouraged to try to correct the interference by one or more of the following measures:
- Reorient or relocate the receiving antenna
- Increase the separation between the equipment and receiver
- Connect the equipment into an outlet on a circuit different from that to which the
- receiver is connected
- Consult the dealer or an experienced radio/TV technician for help.

Canada - IC

Product name: Temperature Data logger

Model name: TREKC1
Model name: TREKC2

IC: 24340-TREKC1
IC: 24340-TREKC2

CAN ICES-3 (B)/NMB-3(B)

EN

This device contains licence-exempt transmitter(s)/receiver(s) that comply with Innovation, Science and Economic Development Canada's licence-exempt RSS(s). Operation is subject to the following two conditions:

1) This device may not cause interference.
2) This device must accept any interference, including interference that may cause undesired operation of the device.

FR

L'émetteur/récepteur exempt de licence contenu dans le présent appareil est conforme aux CNR d'Innovation, Sciences et Développement économique Canda applicable aux appareils radio exempts de licence. L'exploitation est autorisée aux deux conditions suivantes:

1) L'appareil ne doit pas produire de brouillage;
2) L'appareil doit accepter tout brouillage radioélectrique subi, même si le brouillage est susceptible d'en compromettre le fonctionnement.

Changes or modifications not expressly approved by the party responsible for compliance could void the user's authority to operate the equipment.

European Union - CE, RED

Operating frequency: 2402~2480MHz

Max. transmit power: 5.63dBm (TREKC1)
Max. transmit power: 2.00dBm (TREKC2)

RED Declaration of Conformity (DOC)

Unique identification of this DoC: Trek Tab User Guide

We,

Parsyl Inc.

2825 Larimer Street, Denver CO 80205 USA

....

declare under our sole responsibility that the product:

product name: Temperature Data logger

trade name: Trek Tab

type or model: TREKC1

type or model: TREKC2

to which this declaration relates is in conformity with the essential requirements and

other relevant requirements of the RED (2014/53/EU).

The product is in conformity with the following standards and/or other normative

documents:

HEALTH & SAFETY (Art. 3(1)(a)): EN 62368-1:2014/A11:2017; EN 50663:2017; EMC (Art.
3(1)(b)): EN 301 489-1 V2.2.3:2019; Draft EN 301 489-17 V3.2.2:2019; SPECTRUM (Art. 3(2)):
EN 300 328 V2.2.2:2019

OTHER (incl. Art. 3(3) and voluntary specs): N/A
Other Union harmonization legislation (where applicable): N/A
Accessories: N/A
Software: N/A
Technical file held by: Parsyl Inc.

Place and date of issue (of this DoC): 2021/01/11

Signed by or for the manufacturer:
Name: Murat Erdogan
Title: Director of Manufacturing