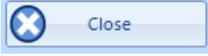


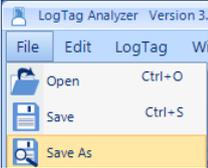
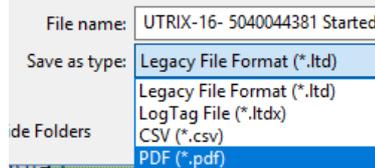
DATA LOGGER



Log Tag: How to Download Data

STEPS	DIRECTIONS
Step 1	 Collect logger from the fridge and push STOP button on logger
Step 2	Connect logger to computer via USB
Step 3	 Open program – Click: Log Tag Analyzer icon
Step 4	 Click: Wizard button for automatic download & save function
Step 5	 Prepare Log Tag for next use – Click: Configure <i>(for instructions, refer to “Log Tag: How to Configure”)</i>
Step 6	<ul style="list-style-type: none">  Locate cradled LogTag(s)  Download and Save LogTag(s) recorded data  Prepare LogTag(s) for next use Once 3 green ticks appear, process is complete
Step 7	 Close the Wizard to look at data: Click Close
Step 8	 <u>Press and hold</u> START button on logger to turn on and start recording
Step 9	Immediately return logger to the vaccine fridge

Save as a PDF – Only in the event of a Cold Chain Breach

Step 1	 Click: File > Save As
Step 2	 Save in PDF format before sending to PHU (Public Health Unit) *

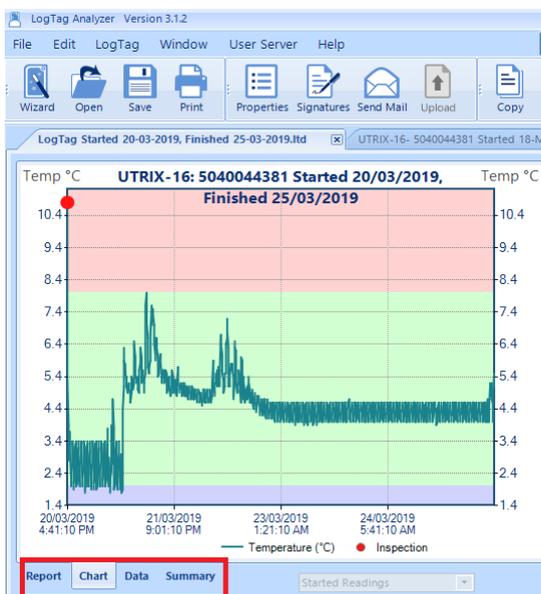
*You must convert file to PDF as only computers that have the Log Tag Analyzer software can read the .ltd file format

DATA LOGGER



Log Tag: How to Analyze Data

1. THE CHART



There are four sections:

1. Report
2. Chart
3. Data
4. Summary

These sections can be accessed by clicking on the tabs at the bottom left of each page.

The **Chart** will be displayed first, by default. The **green** area on the graph represents temperatures within the **acceptable 2°C – 8°C range**.

The **red** area represents temperatures that are **above 8°C**, and the **purple** area represents temperatures that are **below 2°C**. This requires further investigation.

Go to Summary section →→→

2. THE SUMMARY

Statistics for Started readings	
LogTag ID	5040044381
Description	CESPHN Demo LogTag
Battery status	OK
Time zone	UTC + 11:00
Reading interval	5 Minutes
Number of starts	2
Number of readings	1360
Number of started readings	1360
Non alert range	2.0 to 8.0 °C
First reading	20/03/2019 4:41:10 PM
Last reading	25/03/2019 9:56:10 AM
Elapsed Time	4 Days 17 Hours 20 Minutes
Readings range	1.8 to 10.8 °C
Average reading	4.4 °C
Standard Deviation (S)	0.9 °C
Time above/equal 8.0 °C	10 Minutes
Time below/equal 2.0 °C	1 Hour 55 Minutes
Time not in alert	4 Days 15 Hours 15 Minutes
Degree Minutes above 8.0 °C	14.2 °C-Minutes
Degree Minutes below 2.0 °C	8.6 °C-Minutes
Mean Kinetic Temperature	4.5 °C

The **Summary** section gives you information about how long the temperature was outside the acceptable range.

Any temperature below 2°C is unacceptable → contact PHU to report cold chain breach immediately.

Temperatures above 8°C require further investigation:

- Temperatures between **8°C – 12°C** for **less than 15 minutes** are acceptable.
- Temperatures between **8°C – 12°C** for **more than 15 minutes** is unacceptable → contact PHU to report cold chain breach immediately.
- **Any temperature above 12°C** is unacceptable → contact PHU to report cold chain breach immediately.

Go to Data section → →

3. THE DATA

Index	Date	Time	Elapsed	Temperature...	Events	Comment
270	21/03/2019	3:06:10 PM	22:25:00	7.4		
274	21/03/2019	3:26:10 PM	22:45:00	7.4		
275	21/03/2019	3:31:10 PM	22:50:00	7.5		
252	21/03/2019	1:36:10 PM	20:55:00	7.6		
254	21/03/2019	1:46:10 PM	21:05:00	7.6		
255	21/03/2019	1:51:10 PM	21:10:00	7.6		
269	21/03/2019	3:01:10 PM	22:20:00	7.6		
2	20/03/2019	4:46:10 PM	00:05:00	7.8		
253	21/03/2019	1:41:10 PM	21:00:00	8.0	Above Alert	
1	20/03/2019	4:41:10 PM	00:00:00	10.8	Above Alert	Inspection Mark

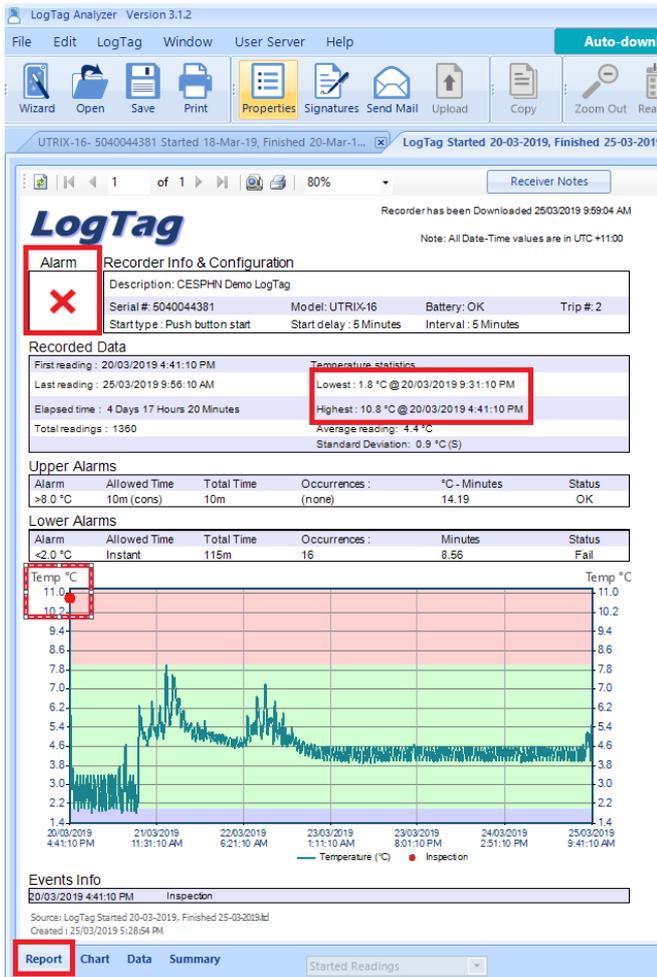
The **Data** section gives you a table which contains every temperature reading at 5 minute intervals.

Click the temperature column to sort from lowest to highest temperatures.

From this we can see how high temperatures went above 8°C, and for how long.

The RED cell (where the yellow arrow is pointing) indicates the “inspection mark” – this is the point at which the logger was taken out of the fridge to be downloaded. This reading can be excluded from analysis as it is expected to be high.

4. THE REPORT



The **Report** section is a general overview of all the sections.

There will be a **GREEN TICK** or a **RED CROSS** in the Alarm box (top left corner) – this is a quick indicator of whether or not all temperature readings were within range.



Alarm	Recorder Info & Configuration
✓	Description: DEMO_IMM
	Serial #: 5040044381
	Start type: Push button start

Example: Green tick when all readings are within range

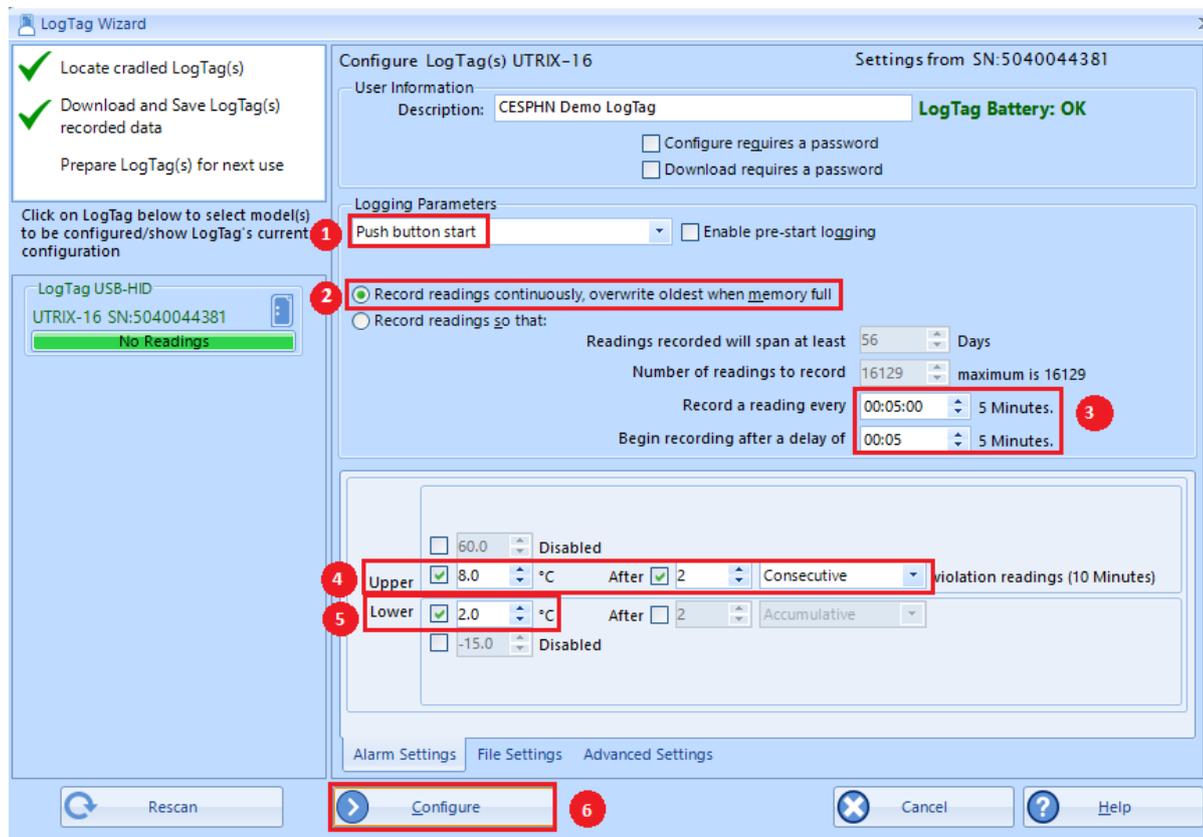
Other important information

- Lowest and highest temperature reading, and what time and date these occurred.
- The **RED dot** on the graph represents the “inspection mark” – this is the point at which data is downloaded from the logger. This will likely be a higher temperature, and can be ignored when analysing data.

DATA LOGGER



Log Tag: How to Configure



STEPS	DIRECTIONS
Step 1	Select: Push button start option
Step 2	Select: Record readings continuously option
Step 3	Set 5 minutes for “Record a reading every” Set 5 minutes for “Begin recording after a delay of” *
Step 4	Set Upper at 8°C after 2 consecutive readings
Step 5	Set Lower at 2°C
Step 6	Click Configure to save
	<i>These configurations will be saved for future – only need to do this ONCE</i>

* A delay of 5 minutes allows for the Log Tag to cool down once placed inside fridge. If you plug your Log Tag in externally there is no need for this step.