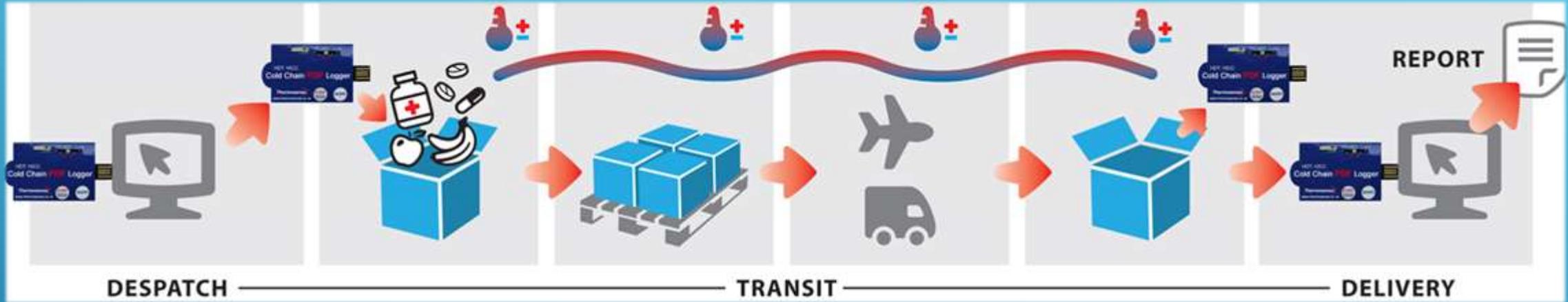


# HDT-10CC TEMPERATURE DATA LOGGER

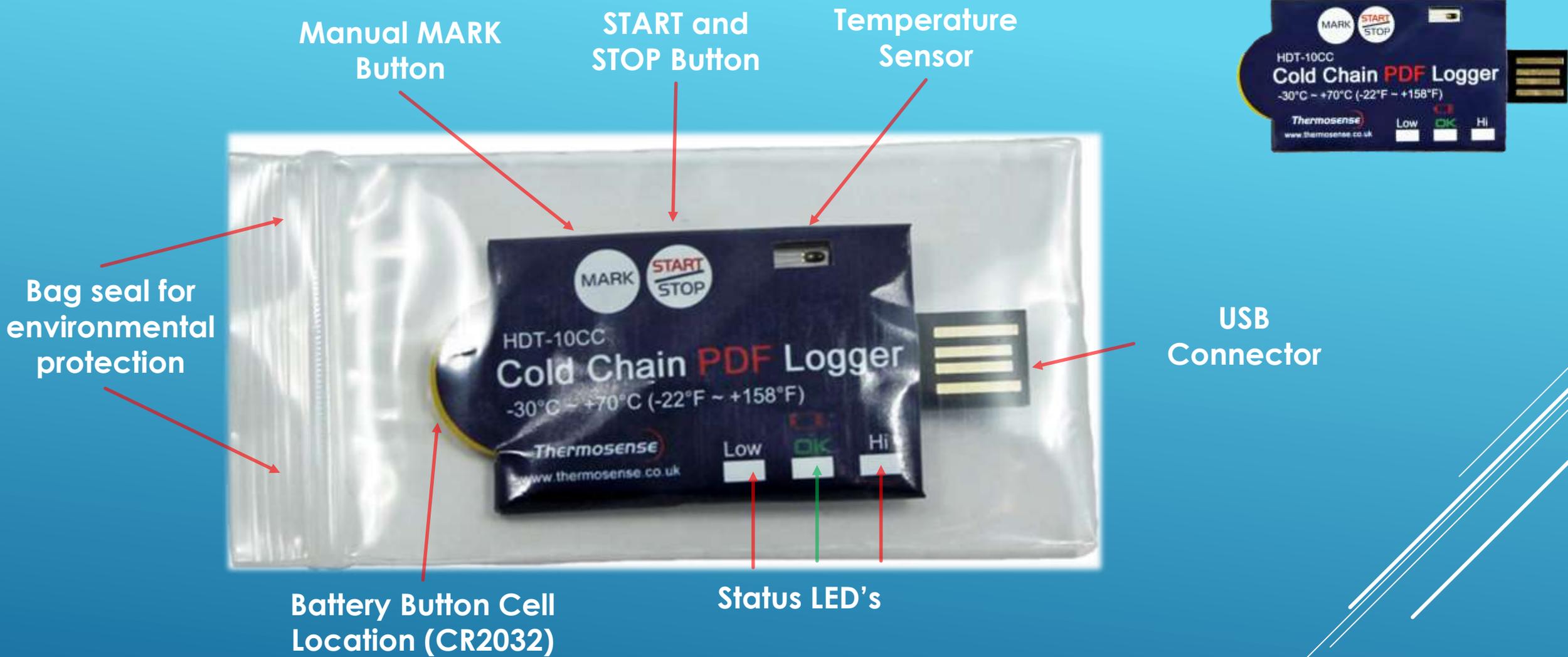


Single use, self contained, -30 to +70°C cold chain logger supplied in a re-seal IP65 heavy duty, see through plastic pouch.

Simple custom setup / start options and non tamper PDF results table



# Full temperature logging from start of cold chain to delivery



# Cold Chain PDF Logger

# 3 Easy steps to have a tamper proof thermal audit trail of your products through your temperature critical supply chain process



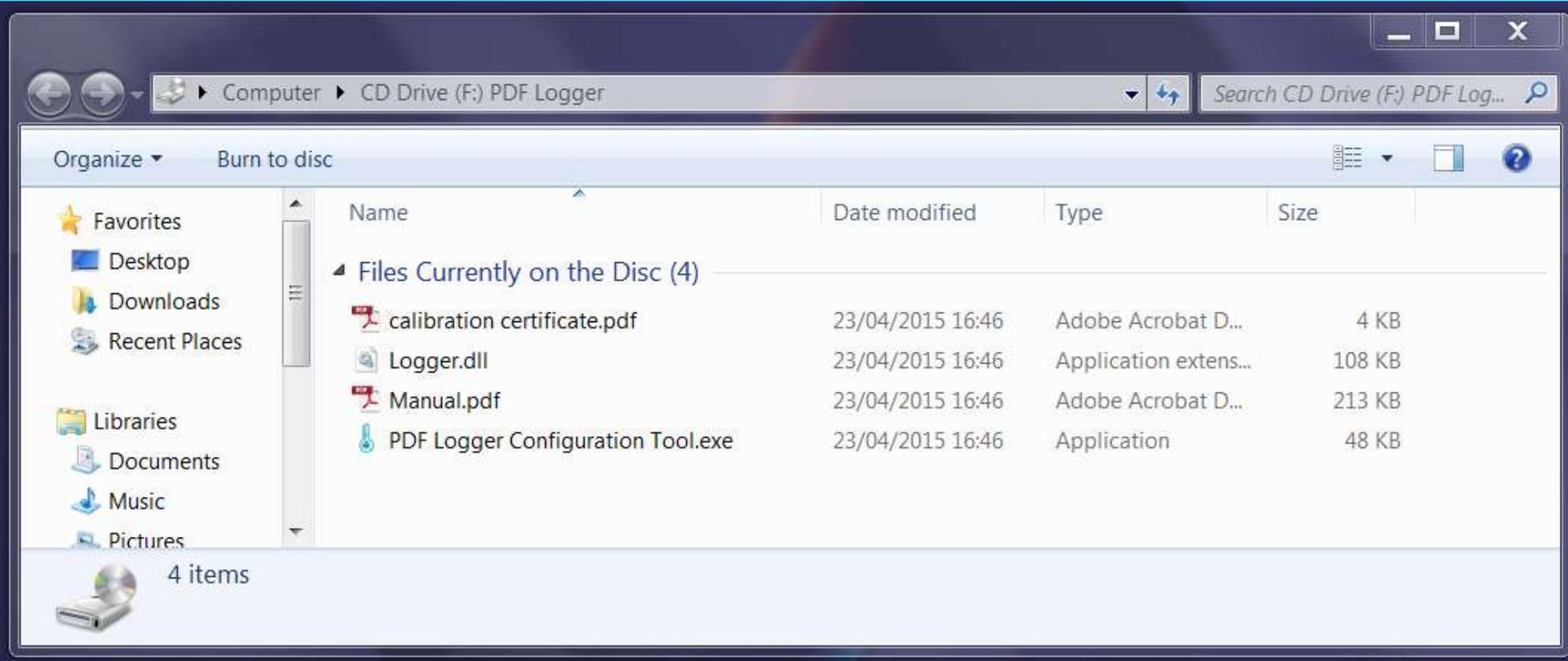
- ▶ **Step 1)** Set the logger up on a Windows™ based PC
- ▶ **Step 2)** Place the Logger in the IP65 pouch with your temperature critical delivery
- ▶ **Step 3)** Retrieve your Logger at the delivery site, plug in to any Windows™ based PC and down load your tamper proof PDF Data, PDF Calibration Certificate, PDF Manual

# Step 1

Take the logger out of the IP65 re-sealable pouch and plug it into your USB port on any Windows™ based PC



# Step 1



Select from looking at the calibration certificate, the manual or the PDF configuration tool

# Calibration Certificate

This logger has been designed as a single-use device to remain within its specifications for the life of the product and does not require future accuracy adjustments.

We certify this logger listed below has been manufactured and tested for calibration accuracy to meet the published specifications.

This calibration testing was performed in accordance with national system guidelines of ISO/IEC Guide 17025. Our Calibration Standards instruments are traceable to NML/ROC and NIST/USA or other countries Standards.

## Product: Single Use PDF Temperature Datalogger

Serial Number: 1630669  
Lot MFG Date: 21 Mar. 2016  
MFG lot#: 1602287  
Firmware version: V5.5  
Sensor type: NTC type thermistor, 833ET-1S87P-70370  
Measuring Range: -30°C to 70°C (-22~158°F)  
Accuracy: +/-0.5°C

## Product Test Criteria

Test point	Test temperature	Accepted tolerance	Test result
1	-10.7°C	+/-0.5°C	Pass
2	25.5°C	+/-0.5°C	Pass
3	47.4°C	+/-0.5°C	Pass

## Calibration Reference

Device	Model	Certificate No.	Uncertainty of measurement
Digital Multimeter	Agilent 34401A	201309106711	0.10hm
Thermometer	Uei DT200	RGcp2014-0016	+/-0.2°C

Date of calibration: 21 Mar. 2016

Inspector number: 130004

# Step 1



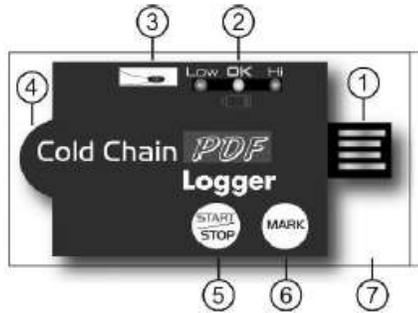
# On board calibration certificate validates the logger

## Instruction Manual

### Cold Chain PDF Logger



#### Product Description



- ① USB2.0 plug & play connector. USB driver is not required.
- ② LED indicator:  
**Low/High:** Red LED blinks when the measuring set limit value is exceeded.  
**OK:** Green LED blinks triple every 5 seconds when logger is in standby mode but not yet started to log readings. When logging function is started, green LED blinks every 2 seconds
- ③ Accurate NTC thermistor for temperature measuring.
- ④ Pre-installed CR2032 battery
- ⑤ START/STOP key:  
After the logger is programmed, press "START" key for 2 seconds to start the logging.

To stop it, press "STOP" key for 2 seconds.

⑥ MARK key:

To place a bookmark manually during the delivery transition, press MARK key. You will see time stamps on generated PDF report.

⑦ IP65 zipped plastic bag

Open to program the logger and well seal it before leaving the logger in shipping container.

#### Operation

**NOTE:**

1. *Adobe Reader software is required.*
2. *Please program the logger and generate the PDF report under room temperature.*  
*For example: If the logger is taken out from -30°C freezer, please leave it in air for few minutes before plugging into PC to generate PDF report.*
3. *The programming execute is designed as \*.exe format.*

#### **Step1** Configuring the data logger

Anytime before the logging is started, the logger can be programmed several times. If the logger is locked by password after first configuration, password will also be required to program the logger again.

- Connect the data logger to a PC via the USB port.

- The logger status LEDs blink for two runs.  
- Window Automatic playback is displayed.

- Click on Open folder to view files.

- Open the file "PDF Logger Configuration Tool.exe".

- The default language is English, you may change it to German, French, Italian or Spanish per your need. The generated PDF report will be identical to the language you choose.

- To review the instruction manual, you may click "Manual" to open the manual PDF file.  
- To check the calibration report of the logger, you may click "Certificate" to open the corresponding file.

-The definition of each programmable parameters are:

★ Sampling rate

Select the sampling interval you need from 30 seconds to 2 hours.

★ Start delay

Select the start delay from 0 min to 2 hours.

For example, if the delay time is 5 mins and sampling rate is 5 mins means the real time to activate the logging function is 5 mins after



## Step 1

# Selecting the manual - full explanation of each option during setup

you pressing the START key so the first data is logged 10 mins after pressing START key.

★Temp. Unit

Select the temperature displayed unit you want to see on PDF report. It can be Celsius or Fahrenheit.

★Password

The password security function is default as off. You may enable it and input at most 16 characters (alphabets or numbers) to prevent an unauthorized re-programming.

★Company Name

Your company name will be displayed on PDF report as title.(Max. 20 characters)

★Alarm types

No matter what alarm types is picked up, the LED will not stop flashing once it is triggered as ON even if the measured value later returns to normal range.

**Single:** a LED alarm is triggered immediately when the measured value exceeds the alarm threshold.

**Cumulative:** a LED alarm is not triggered when the measured value exceeds the alarm threshold, but only once the overall average value during alarm delay duration exceeds the alarm threshold.

**Disable:** No LED alarm function during the logging process

★Alarm delay

The preset alarm delay time for single alarm type is always zero.

The adjustable alarm delay time for cumulative type is 5 min to 2 hours.

★Alarm Limits

Select the alarm threshold value. For example, if choosing 2~8°C means the measured value below 2°C or above 8°C will trigger the LED indicator. To summarize, to activate a LED flashing when 30-min average value of hazardous alarm delay period is higher than 8°C, please program the alarm delay as 30 mins, alarm type as cumulative and range as 2~8°C

★Time zone

The logger will be auto synchronized to your PC time when you press "Save" to confirm the settings. Any time zone changes during the measurement are not taken into account.

The default value of above parameters are:

Sampling rate: 5 min Alarm Type: Single

Start delay: 0 min Alarm delay: 0 min

Temp. Unit: °C Alarm Limits: 15 – 25°C

Password:disable

Company Name: blank

Language: English

Once all the programming is done, press "Save" to confirm the setting and then you may close the setup window and remove the logger from PC USB port.

**Step2 Start logging**

-When logger is successfully programmed, the green LED blink triple every 5 seconds to indicate the logger is in standby mode.

-Please seal the zipped bag well and then press "START" key for two seconds when you want to start the logging.

-Red LEDs will flash three runs to indicate the logging is activated.

-During the logging, the green LED will blink every two seconds. If battery power is too low to maintain a normal operation, red LED blinks.

- To place a bookmark manually during the delivery transition, press MARK key.

**Step3 Download data**

-Press "STOP" key for two seconds to stop the

logging. You may also directly plug logger into PC USB port to stop the logging and generating PDF file.

-It takes just few seconds to generate a PDF report. The status LEDs blink while logger is generating PDF report.

**Technical data**

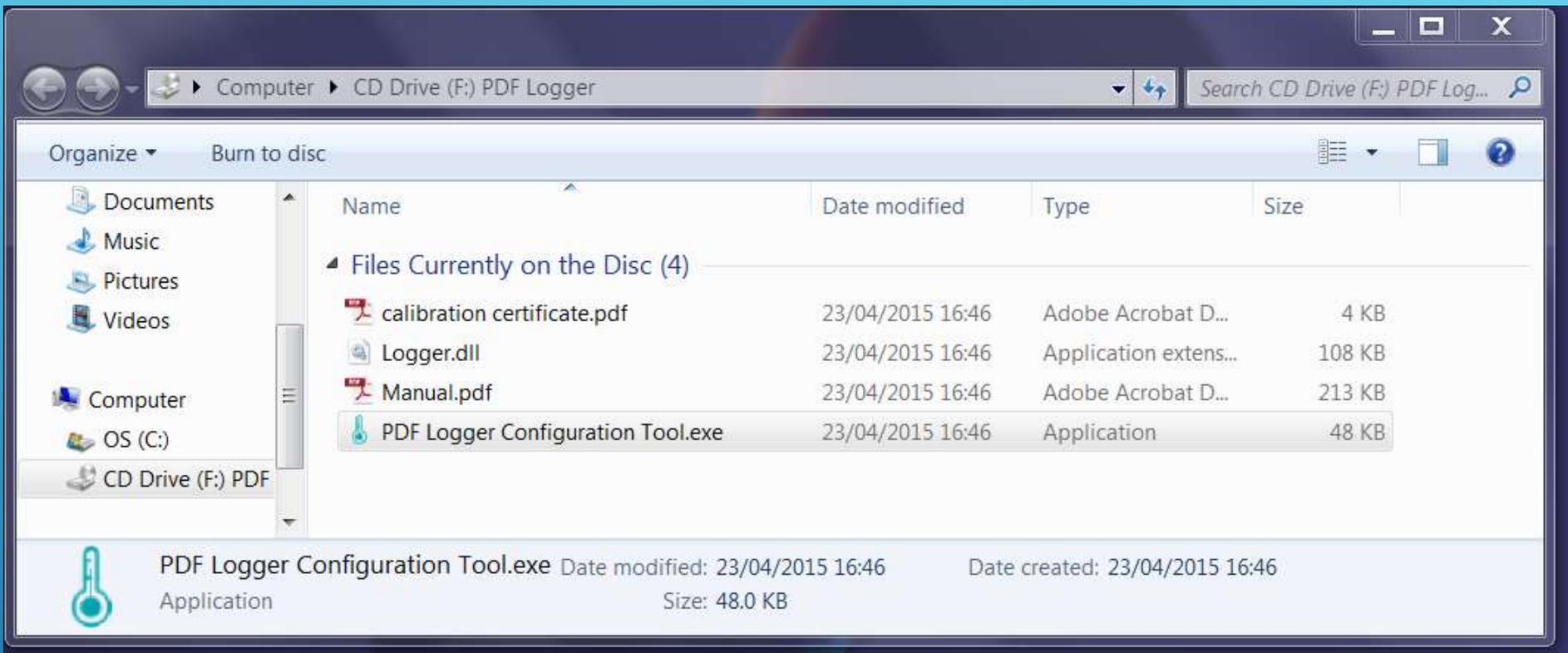
Model	PDF data logger, single use
Temp. measurement	By NTC thermistor, -30~70°C (-22~158°F)
Temp. resolution	0.1°C (0.1°F)
Temp. accuracy	+/-0.5°C
Logging Type	Single Use
Sampling points	8192 readings
Shelf Life	12 months shelf time
Operating temp.	-30~70°C (Logging status); room temp.(PC status)
Operating RH%	Humidity < 80%
Storage temp.	-40~85°C
Storage RH%	Humidity <90%
Weight	~10g
Battery	1PC 3.0V CR2032 (installed before shipment)
Sampling interval	30 seconds, 5, 10, 30, 60, 90, 120 minutes
Start delay	0, 5, 30, 45, 60, 90,120 minutes
Alarm range	-20~ -10°C, -10~0°C, 2~8°C, 0~15°C, 0~25°C, 15~25°C or other values
Alarm delay	0, 5, 30, 45, 60, 90, 120 minutes
Alarm type	Single, Cumulative, Disable
Operation keys	2 Keys, Start/Stop & Mark
LED indicator	REC, Low Bat., High /Low alarm
Protection class	IP65
Directives	EN12830, FDA21 CFR Part 11
Operating System	Windows only



## Step 1

# Selecting the manual - full explanation of each option during setup

# Step 1



A standard auto play window will open up – select the “Open folder to view files” link and start the setup process by selecting the “PDF Logger Configuration Tool.exe option”

## Step 1



### Choose

- 1) Language ( 5 Languages)
- 2) Sample Rate (30seconds/5/10/30/60/90/120 minutes)
- 3) Start Delay (Select 0/5/30/45/60/90/120 minutes)
- 4) Temp. Unit (°C or °F)
- 5) Password – (Enable allows you to enter a password)
- 6) Alarm Type (Disable / Single event / Cumulative)
- 7) Alarm Delay (Select 0/5/30/45/60/90/120 minutes)
- 8) Alarm Limit (6 fixed settings or “other” sets your own)
- 9) Co' Name (20 Character field for ID)

N.B. Have links from this page back to “Certificate” and “Manual”

# Main screen for setting up logger.



Step 1



Select “Save” after setting up and you get this confirmation window that logger has been configured successfully. Press “OK” button to close window



## Step 2



Take logger from USB slot. The “Low” “OK” and “Hi” LED’s briefly flash, then the “OK” LED flashes 3 times every 5 seconds, to tell operator the logger is “READY”. Place the logger back in the bag and seal closed.



## Step 2



To activate the Logger you have to hold the “START” button for 2 seconds.

The LED’s will sequentially flash **RED** 3 times to indicate the logging has started. If you have put a delay in, it will then wait for the delay to time down and then start logging.

During logging the “OK” LED blinks Green every 2-3 seconds, telling the operator that this logger is recording the temperature



Alarm Condition LED's

## Step 2



During the log period, depending on setup, if the Alarm criteria has been exceeded, the “Low” and / Or “Hi” LED’s will turn RED and will be visible through the bag

## Step 3

# Retrieving the Data from Your Logger



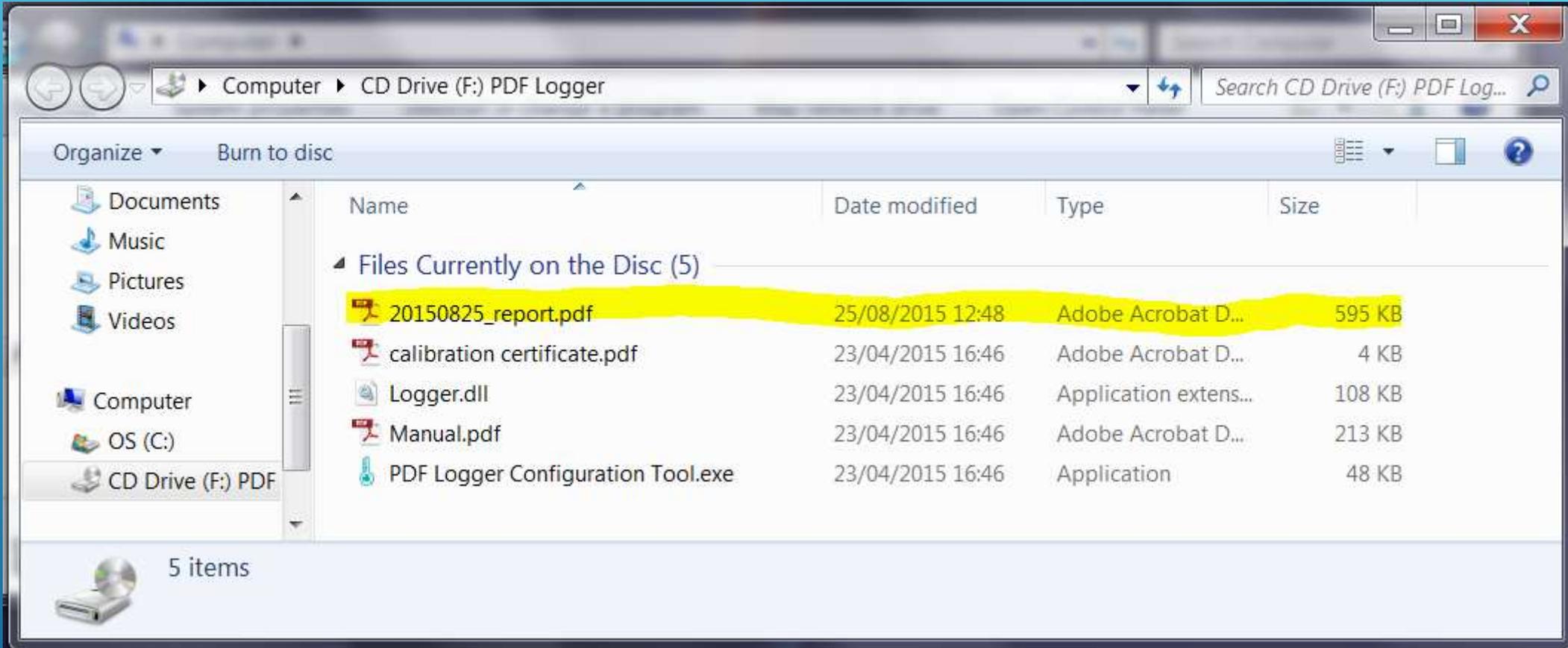
The LED's will briefly flash to generate the PDF results folder

To Stop the Logger either :

- 1) Press and hold the "STOP" button for 2 seconds and connect to USB or
- 2) Take the logger out of the bag and insert it into the USB slot directly

An automatic window will open with the additional folder named “year-Month-Date\_report “ which is the date at which point the logger was stopped and the PDF report generated.  
(example highlighted in yellow)

## Step 3



Name entered as ID when setting up under "Company / Name"

Sam - Test

# Temperature Data logger

SN 1550120 **ALERT**

## Step 3



Serial Number of this Individual logger

Device Specification Information for Audit purposes together with how the logger was configured at the start-up (Step 1)

Device Specification	
Production date	11 May. 2015
Production lot	1503449
Firmware version	V5.3
Original time zone	UTC+0
Start	11:40, 25 Aug. 2015
Finish	11:47, 25 Aug. 2015
Sampling Rate	30 Seconds
Start Delay	5 Minutes
Readings	4 points
High Alarm	25.0°C
Low Alarm	15.0°C
Alarm Delay	0 Minutes
Alarm Type	Single event

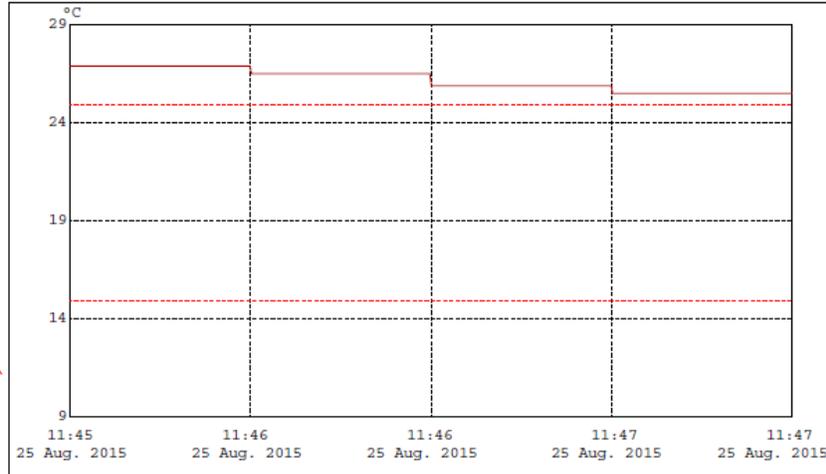
Statistics(excludes Start Delay)	
Duration Time	0Days 0Hrs. 2Min.
Max Temp	26.9°C
Average Temp	26.2°C
Min Temp	25.5°C
Std. Dev	0.5°C
MKT	26.2°C
Total time within	0Days 0Hrs. 0Min.
Total time above	0Days 0Hrs. 2Min.

Statistics of the Log with breakdown of Max / Average / Min Temperatures and total times the logger was within the temperature Alarms and also total time it was outside these conditions

File Information	
File created	11:48, 25 Aug. 2015

Date and Time the File was created (STOPPED)

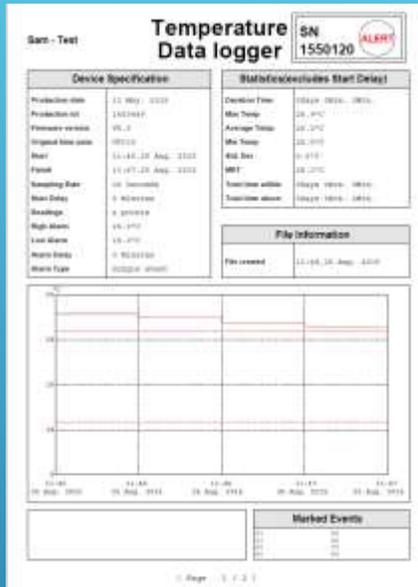
Graphical representation of the Log period, the temperatures recorded and any alarm (Hi and Low set in Step 1)



Log of when the "MARK" button was pressed to indicate specific events

Marked Events	
(1)	(5)
(2)	(6)
(3)	(7)
(4)	(8)

# Audit Trail of any Logger is held within one folder :



### Calibration Certificate

This logger has been designed as a single-use device to remain within its specifications for the life of the product and does not require future accuracy adjustments.

We certify this logger listed below has been manufactured and tested for calibration accuracy to meet the published specifications.

This calibration testing was performed in accordance with national system guidelines of ISO/IEC Guide 17025. Our Calibration Standards Instruments are traceable to BLM/BOC and NIST/USA or other countries standards.

**Product: Single Use PDF Temperature Datalogger**

Serial Number: 1550120  
Lot MPD Data: 11 May 2015  
MPD lot#: 1501010  
Firmware version: 05.3

Sensor type: RTD type (Thermosense, 8318T-100TD-7037E)  
Measuring Range: -30°C to 70°C (-22°F to +158°F)  
Accuracy: +/-0.5°C

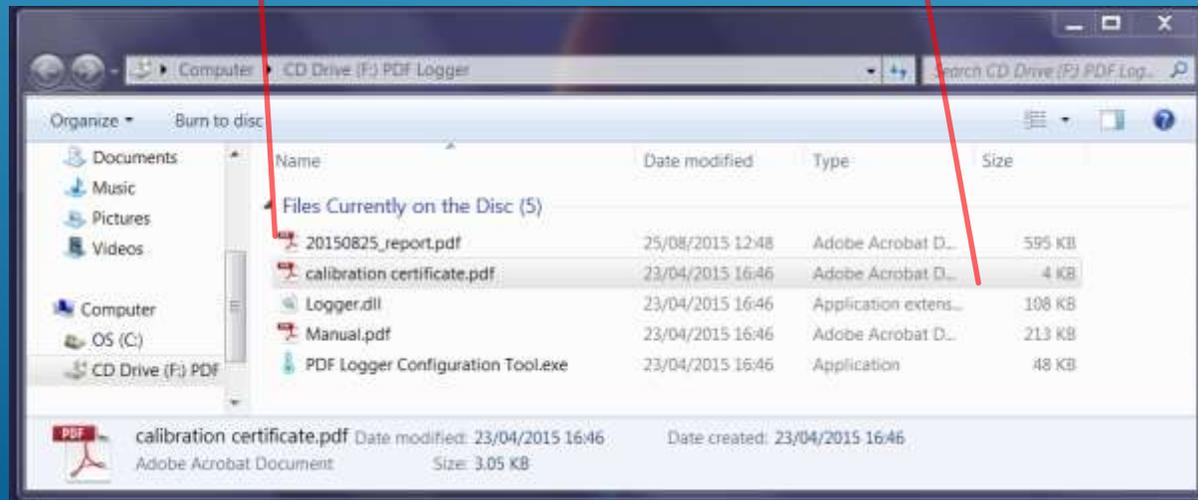
**Product Test Criteria**

Test point	Test temperature	Accepted tolerance	Test result
1	-30.7°C	+/-0.5°C	Pass
2	26.5°C	+/-0.5°C	Pass
3	67.8°C	+/-0.5°C	Pass

**Calibration Reference**

Device	Model	Certificate No.	Uncertainty of measurement
Digital Multimeter	Agilent 34401A	201309106711	0.100%
Thermometer	Del D0200	80p2014-0014	+/-0.2°C

Date of calibration: 11 May 2015  
Inspector number: 130004



# HDT-10CC TEMPERATURE DATA LOGGER



- ▶ Single Use, Self Contained, -30 to +70°C Cold Chain Logger.
- ▶ Simple Custom Setup / Start Options and Non Tamper PDF Results Table
- ▶ Windows™ PC required
- ▶ Adobe Reader Software required (Free Download from web)