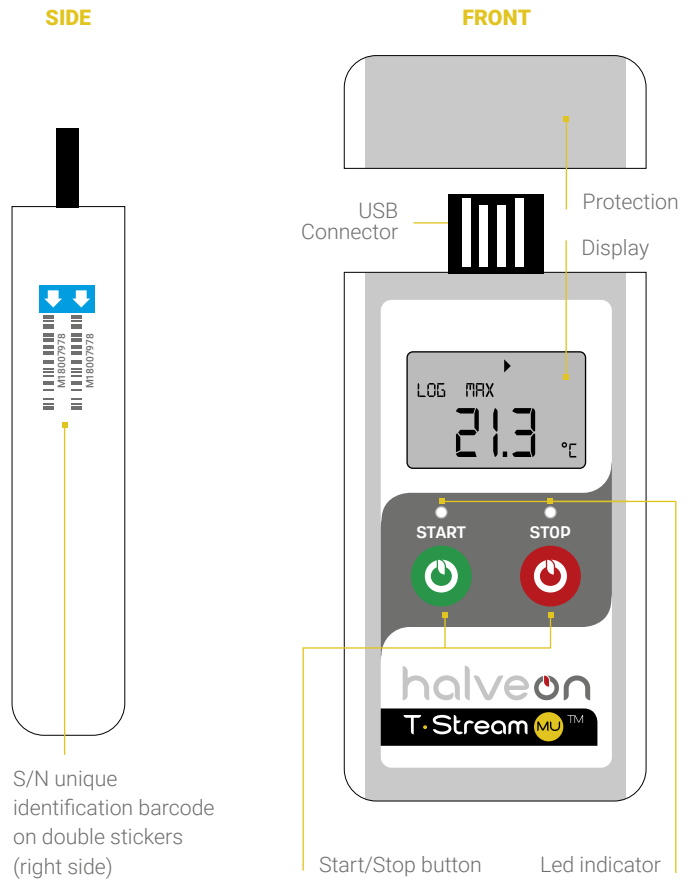
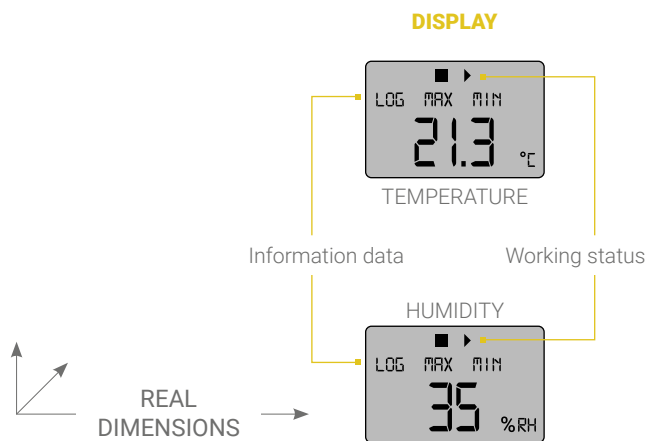
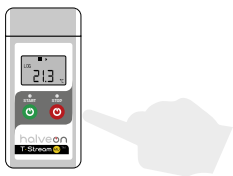


The **Halveon T-Stream MU** could monitoring both temperature & humidity without installing any software, end-user could quickly acquire detailed data reports in both PDF and CSV format.

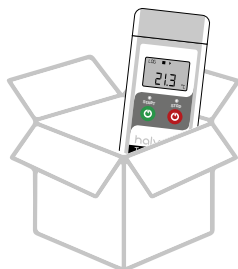


EASY HANDLING

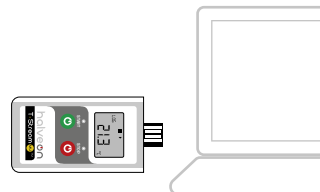
1 Preconfigured and ready to use: press the START button to enable Halveon T-Stream™ MU.



2 Insert enabled Halveon T-Stream™ MU in the delivery.



3 Stop logger by pushing the red button for 5 seconds (Red led flashing 5 times).

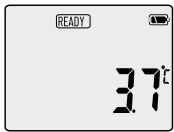


4 Insert the logger into the USBport and wait for the data to be downloaded (Green light will blinking till turn into Red light) and data are ready



OPERATING INSTRUCTIONS AND INDICATORS

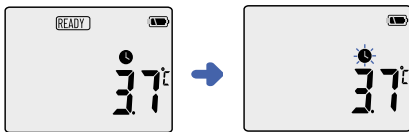
I INSPECTING THE LOGGER



Single press any button or to wake the device, "READY" means logger is OK for a start. The battery indicates the power of the logger.

- Full power, easy using.
- Low power, not suggest using, be aware the device may possibly stop during monitoring.
- Empty power, cannot be started.

II START THE LOGGER



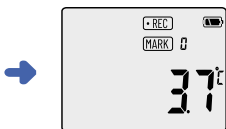
Device programmed a start-delay:

Press and hold "START/STOP" button for more than 4 secs until the "CLOCK" icon

appears then release the button within 2 secs, once see the clock flashing indicates start successfully. After delay ends, the device will record, and the LCD will turn to "REC." automatically.



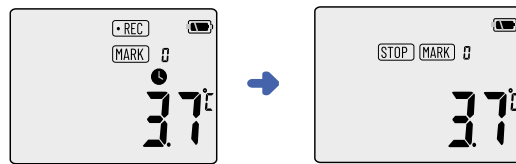
HI: Start-delay means a period that device is starting/working but not recording after delay passed the device will start recording automatically. In other words, when you see the clock flashing or "REC" both means start successfully.



Device not programmed a start-delay:

If the logger doesn't programme a "start-delay", the LCD will show "REC." directly, which means start successfully and is recording now.

IV STOP THE LOGGER



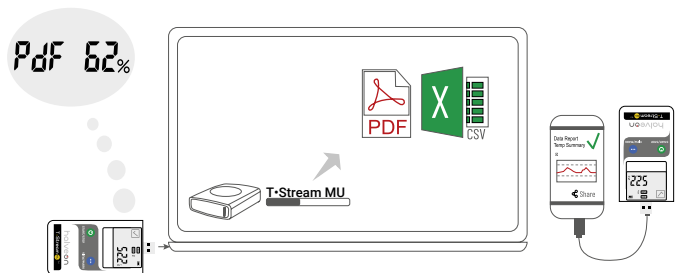
Press and hold "START/STOP" button for more than 4secs until the "CLOCK" icon appears, then release the button within 2secs to stop, then LCD will show "STOP" which indicates stop successfully.

Note: if the logger is not stopped manually, the device will continue to record the data until it is plugged into a USB port on a PC or until the programmed trip length is reached.



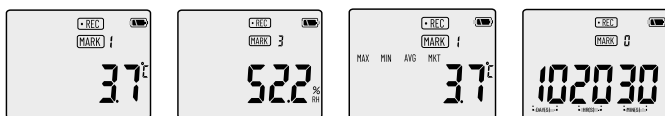
HI: To Start or Stop the device: when hold and press the START/STOP button, a clock will show firstly, Release the pressing means execute the action. If continue pressing, the clock will disappear shortly afterwards which means cancel the action.

V GET THE REPORTS



Connect the unit to PC, and the LCD will show the progress % of generating. Once the progress reaches 100% the file generating process is complete, then a flash disk named "T-Stream MU" will pop up automatically with data reports. Also via an OTG line user could acquire the reports through an Android Smartphone.

III MAKE AND VIEW IN TRANSIT



T-Stream MU loggers provide an option that user could double press "VIEW/MARK" button to mark an event at any time during the logger recording period; the mark will show in the report, the number beside the (MARK) indicates the times that has marked, the maximum mark is 8 times.

This optional function mostly used for some important events or urgent matters happen.

Single-press "VIEW/MARK" button to check the time has been recording and the **MIN / MAX / AVG / MKT** temperature and humidity since recording. (Single-press shows in turn)

The example shows: the logger has been recording 10 days 20hrs 30mins.

VI T-STREAM MU SOFTWARE

T-Stream MU Software Temp/Hum (Multi-Use) V2.4

halveon

Languages: Help

DEVICE INFORMATION 3 S/N: H85080467 Temp. Type: <input checked="" type="radio"/> °C <input type="radio"/> °F Start. Type: Auto Start. Type: Delay Start. Delay: 1 Min Timing: 2019/3/26 12:10:48 Time Zone: UTC+8 2019/3/26 16:18:05 Log Interval: 10 Min Log Cycle: 30 Min Points: 4320	TEMP ALARM 4 <input checked="" type="checkbox"/> Alarm Type: Single Alarm Delay: 5 Min Alarm Low: 2 °C Alarm High: 8 °C	DEVICE STATUS 1 Hardware Check: <input checked="" type="checkbox"/> Device Connect: <input checked="" type="checkbox"/>
TRIP INFORMATION 6 [Empty text box] 240 characters maximum, currently characters remaining: 149	HUMIDITY ALARM 5 <input checked="" type="checkbox"/> Alarm Type: Cumula Alarm Delay: 5 Min Alarm Low: 30.0 % Alarm High: 70.0 %	OTHER FUNCTIONS 7 Forbid Manual Stop: <input type="checkbox"/> Restart: <input type="checkbox"/> Auto Config: <input type="checkbox"/>

OPERATE

Submit

Notice: device status OK! 2

VI-1 DEVICE EXAMINATIONS 1 2

"T-Stream Software" innovative inspecting function could effectively ensure the safe use of the device after configuration. "Double click" Software icon to enter and then connect the device to your computer, the software will automatically examine the device including battery power, hardware, and connection status.

Red light means error; green light means OK to start a configuration



HI: Sometimes due to an aging of PC USB port, or not connect USB port entirely will lead to a missing. If this happens, please double check the PC USB port or try another port.

VI-2 DEVICE CONFIGURATION 3 4 5

Device information area 3, each unit has a unique serial number, and user could configure the device on their preference.

a) START TYPE

MANUAL: after configured successfully, the device need manually press button to start.

AUTO: after configured successfully, the device will auto-execute.

b) START MODE

DELAY: after the delay period passed, the device will start recording automatically (if no need delay, select 0 min)

TIMING: the logger will auto-start on a given time.

TEMPERATURE: the logger will auto-start recording once meet the selected range.

c) TEMP AND HUMIDITY ALARM 4 5

Select a temperature and humidity range, alarm type and delay time for the alarm settings.



HI: Temp & Humidity Alarm is not when temperature exceeds the selected range will alert in the way of sounding, but to indicates on the LCD screen and the reports. If no need then un-select the function then won't show the alarm information. (Image 3)

VI-3 OTHER FUNCTIONS 6 7

a) TRIP INFORMATION

Type any information in area 5, the info will be presented on the generated reports. The info could be: customer, location, order number, etc.

b) FORBID MANUAL STOP

After selected, user cannot stop the device manually only by connecting the device to a PC and after configured the LCD will show a lock icon:



c) RESTART

After selected, user doesn't need config the device every time. To restart is the same as start operation.

Note: the original data will be formatted once restart, please acquire the reports before restarting.

d) AUTO CONFIG

When user need to config many units at one time, for time efficiency, select the required configuration, and then choose "Auto Config", the software will config the units automatically: just plug in and out, which no need any more operations.

VII TECHNICAL SPECIFICATION

MODEL	T-Stream MU
TYPE	Multi-use
SENSOR	NTC
RANGE	-35°C~+70°C (-31°F~+158°F)
ACCURACY	±0.3°C (±0.54°F) ±3%RH (30°C, 10%~70%) ±0.4% RH (Rest)
RESOLUTION	0,1
CAPACITY	16000 points (8000 temp, 8000 humidity)
BATTERY	3.6v Li
BATTERY LIFE	2-3 years or longer
CALIBRATION	Factory Calibration and NIST CNAS
CERTIFICATION	• CE • RoHS • DO160 • IATA PI970 II
WARRANTY	1 year
SIZE	106x51x18mm
WEIGHT	65g
WATER-PROOF	IP54
CONNECTION	USB 2.0
SOFTWARE	T-Stream Software

VIII IMPORTANT NOTES

USAGE

- During the time of reports generating, please do not pull off the logger.
- To make sure long-term effectiveness of logger, please store at regular temperature before using.
- It might be shorting the shelf life of the logger when using out of measurement range.
- Please recycle or dispose the logger in accordance with local laws and regulations.

BATTERY

- Do not throw devices with batteries in the fire or expose to extreme temperature and may lead to destruction of the battery and may cause injuries.
- Do not short-circuit or reload batteries: safety and hidden risk!
- Batteries are to be kept away from children.

SECURITY NOTE

- Do not use under microwaves, there is an explosion risk.
- X-ray can damage the logger.

LIABILITY

The manufacturer shall not be held liable:

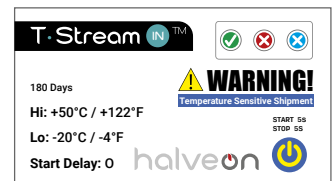
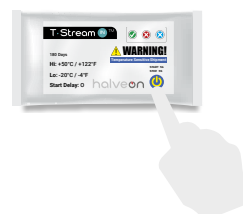
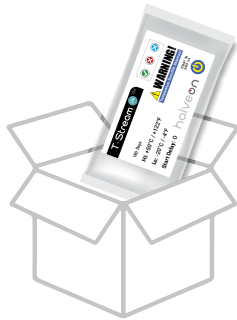
- If the device was used beyond the manufacturer's given limitations
- For any claims due to the improper storage and use of the device
- For any problems with the cooling unit
- For the bad quality of the monitored goods, if any.
- For incorrect readings if the device was used with activated low battery sign.

ATTENTION: the T-Stream MU loggers monitor temperature and humidity exposure and not the product quality. Its purpose is to signal if product quality evaluation/testing is required.

- Eager to **monitor your cold chain** and have an answer at a glance? Then Halveon T·Stream™ IN is the answer to your request, as it continuously monitors all relevant data.
- The Halveon T·Stream™ IN indicators are specially developed to monitor the cold chain in the **pharmaceutical logistics**.
- As a pre-programmed device the indicator Halveon T·Stream™ IN can be **instantly used** to monitor your temperature sensitive shipments.
- Upon receipt the 3 LED's at the front side of the electronic indicator **gives you a fast and clear status** of the condition of your goods.

EASY HANDLING

- Press the START button to enable Halveon T·Stream™ IN.
- Insert enabled Halveon T·Stream™ IN in the delivery.
- Remove the device from the delivery, press STOP to disable it.
- Check the status of the led after receiving the goods.



OPERATING INSTRUCTIONS

- Push **Start/Stop** button for 5 sec and notice **GREEN LED** flashes three times to indicate a successful start.
- Attach the started Halveon T·Stream™ IN to your shipment.
- Push **Start/Stop** button for 5 sec and notice **RED LED** flashes three times to indicate a successful stopping. Check the status after receiving the goods.

OK Ok (flash 1 time for every 30 sec)

UNDER Low threshold activated (flash 1 time for every 30 sec)

OVER High threshold activated (flash 1 time for every 30 sec)

OPERATING INSTRUCTION

T·Stream IN™

180 Days

WARNING!
Temperature Sensitive Shipment

Hi: +50°C / +122°F

Lo: -20°C / -4°F

Start Delay: 0

START 5S STOP 5S

LED indicators

Configuration info

Start/Stop button

Instructions

TO START:
Push the button 5 seconds
The **GREEN LED** flashes 3 times = **ACTIVE**

Status	LED	Flashing
Working	Green	1x/30s
Over	Red	1x/30s
Under	Blue	1x/30s

EXP: (MM/YY)

Glue Spot

Barcode label

Expiry Date

OPERATING INDICATIONS

START/STOP

STATUS	ACTION	LED CONFIRMATION
START INDICATOR	5 SEC PUSHING BUTTON	OK LED FLASHING 3 TIMES ●●●
STOP INDICATOR	5 SEC PUSHING BUTTON	ALERT LED FLASHING 3 TIMES ●●●

STATUS REQUEST BY PUSHING BUTTON 1 TIME

STATUS	ACTION	LED CONFIRMATION
NOT STARTED	PUSH BUTTON 1 TIME	OK LED+ALERT LED FLASH 1 TIME ●●
RECORDING-OK	PUSH BUTTON 1 TIME	OK LED FLASH 1 TIME ●
RECORDING-LOW ALARM	PUSH BUTTON 1 TIME	BLUE LED FLASH 1 TIME ●
RECORDING-HIGH ALARM	PUSH BUTTON 1 TIME	ALERT LED FLASH 1 TIME ●
RECORDING-HIGH AND LOW ALARM	PUSH BUTTON 1 TIME	BLUE LED AND ALERT LED FLASH 1 TIME ●●
STOPPED-OK	PUSH BUTTON 1 TIME	OK LED FLASH 2 TIME ●●
STOPPED-LOW ALARM	PUSH BUTTON 1 TIME	BLUE LED FLASH 2 TIME ●●
STOPPED-HIGH ALARM	PUSH BUTTON 1 TIME	ALERT LED FLASH 2 TIME ●●
STOPPED-HIGH AND LOW ALARM	PUSH BUTTON 1 TIME	BLUE LED AND ALERT LED FLASH 1 TIME ●●

USING NOTES

- Take care of Expiry date
- Don't hold the indicator too long in your hand (false alarm through self-heating)
- Only for disposable use