SENSITECH LTE CAT-M-2G Temperature Tracker User Manual

USER MANUAL

For

LTE CAT-M/2G Temperature Tracker, Non-Lithium
LTE CAT-M/2G Air Temperature Tracker, Non-Lithium
LTE CAT-M/2G Air Probe Temperature Tracker, Non-Lithium
LTE CAT-M/2G Air Probe Temperature Tracker, Extended
LTE CAT-M/2G Temperature Tracker, Extended
LTE CAT-M/2G Air Temperature Tracker, Extended

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REVISION HISTORY:

REV	DESCRIPTION	DWN	APVD	DATE
3	Initial Release	JZL		28SEPT20
3.1	Revise Product description	TP		25NOV20
3.2	Updated the FCC and IC statements	TP		23DEC20
3.3	Updated the FCC and IC RF exposure statements	TP		29DEC20

1. Introduction

1.1. Purpose

This document describes the usage of a TEMPTALE GEO/VIZCOMM VIEW- LTE/LTE EXTENDED, ULTRA/ ULTRA EXTENDED, ULTRA DRY ICE/ ULTRA DRY ICE EXTENDED device.

1.2. Scope

The intended audience is a valued customer.

1.3. Description

LTE CAT-M/2G Air Probe Temperature Tracker, Extended/LTE CAT-M/2G Temperature Tracker, Extended/LTE CAT-M/2G Air Temperature Tracker, Extend is a LTE-M/2G GSM Quad band tracking device, and sensor data logger designed for the transportation industry. It is primarily intended to be used as a real time position-monitoring device, which will also produce accurate temperature and humidity. Specific variants of the device also uses various sensors to detect when the aircraft has taken off and when it has landed to disable/enable the cellular modem.

The following is a brief summary of its features:

1. LTE-M/2G GSM Quad Band
2. Internal battery
3. Accelerometer (optional)
4. Temperature Sensor
5. Humidity Sensor
6. Light Sensor
7. Pressure Sensor (optional)
8. NFC for secondary download (optional)
9. Dry Ice Probe (optional)
10. User Interface

Manufacturer Information

Company Name: SENSITECH Inc.
Address: 800 Cummings Center, Beverly, MA USA

Importer Information : PENDING

Company Name: XXXXXXXXXX
Address: XXXXXXXXXXXXX

1.4. Radio Frequency Characteristics

1.4.1. Operating Frequencies

LTE-FDD: B1/B2/B3/B4/B5/B8/B12/B13/B18/B19/B20/B26/B28
LTE-TDD: B39 (for LTE CAT-M only)
GSM: GSM850/900/1800/1900
CE: Bands 46A/47/48/50/54/56B
NFC: 13.56MHZ (only used for secondary download of sensor data)

1.4.2. TRP/TIS

Cellular Maximum Conducted TRP: TBD
Cellular Minimum Conducted TIS: TBD

2. Physical Appearance

2.1. User Interface

The user interface consists of the following:

1. Six LEDs (2 sets of red, green, blue)
2. Two buttons(Start/Status)

The LEDs are intended to allow quick and easy-to-read status to be conveyed to the end user. The user can immediately know the status of the unit during startup and operation.

2.1.1.1. System Startup Sequence

During startup, the Blue LED will blink rapidly.

Once it has completed its startup tests, the LED will indicate the following:

Red	Hardware test failure, solid Low battery, blinking
Green	Attempt to get on network, blinking
Blue	Hardware test complete, no blinking

2.1.2. Buttons

There are two buttons on the device:

1. Start/Stop - a configurable press delay is added, usually configured to be held for three second before it starts.
2. Status- a configurable press delay is added usually configured to be held for three seconds before it conducts a status check.

3. <u>Using the Device</u>

3.1. Starting the device:

To start the device, press the START button. If the Start Key feature is enabled, the START button must be held down for 3 seconds. The device may only be started from sleep mode.

3.2. Stopping the device:

To stop the device, press the START button. If the Stop Key feature is enabled, the START button must be held down for 5 seconds to stop.

3.3. Status Check the device:

To check the status of the device, press the STATUS button. The STATUS button will indicate the device mode with a unique LED blink pattern. See table below.

3.3.1. Status LED Indicators

16	Un-configured mode, Not Started
4	Customer Ready Mode, Not Started
2	Running, Started
1	Stopped, Not Started

4. <u>Software</u>

This unit reports data over the cellular network. This data is accessible via several web-based platforms that target various industries. Please contact customer support for more information.

5. <u>Disclaimers</u>

	Risk of Fire Hazard if battery is not charged in accordance with manufacturer's instruction.
	RISK OF EXPLOSION IF BATTERY IS REPLACED BY AN INCORRECT TYPE. DISPOSE OF USED BATTERIES ACCORDING TO THE INSTRUCTIONS
	Do not dispose battery along with household waste.
	There are no user serviceable parts inside, battery cannot be replaced by the end user, and will result in damaging device.
	To comply with FCC/IC RF exposure limits for general population / uncontrolled exposure, the antenna(s) used for this transmitter must be installed to provide a separation distance of at least 20 cm from all persons and must not be co-located or operating in conjunction with any other antenna or transmitter.

5.1. FCC- pending

Federal Communications Commission (FCC) Statement

15.21
You are cautioned that changes or modifications not expressly approved by the part responsible for compliance could void the user's authority to operate the equipment.

15.105(b)
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.

15.19

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 of the device.

5.2. IC- pending

Canadian Notice

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.

5.3. CE - pending

Hereby, Sensitech declares that the radio equipment type LTE CAT-M/2G GSM/GPRS Tracking Device is in compliance with Directive 2014/53/EU. The full text of the EU declaration of conformity is available upon request.

5.4. Brazil – pending

Anatel ID: TBD

Modem: Quectel BG-96

5.5. NOM – pending

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Documents / Resources

	SENSITECH LTE CAT-M-2G Temperature Tracker [pdf] User Manual 120866SST, SRM-120866SST, SRM120866SST, LTE CAT-M-2G Temperature Tracker, LTE CAT-M-2G, Temperature Tracker