

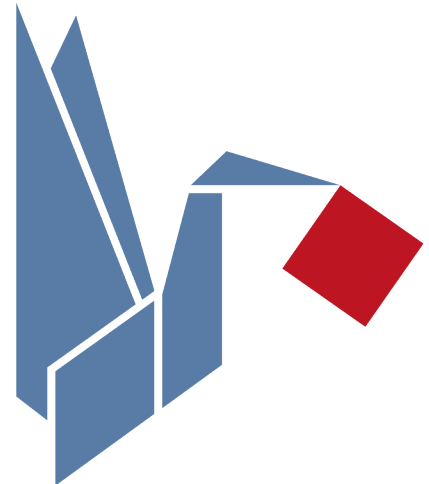
TempNFC ENT

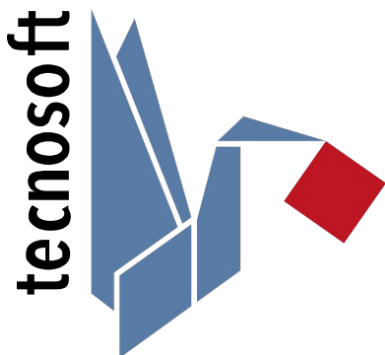
User Manual

Version 2.0.6 Data

01/04/2023

tecnosoft
WE DELIVER DATA





Tecnosoft srl
Via Luigi Galvani, 4, 20068, Peschiera Borromeo (MI) –
ITALY
+39 0226922888 - tecnosoft@tecnosoft.eu -
tecnosoft.eu



INDICE

LICENSE TO USE	4
INTRODUCTION	5
MINIMUM REQUIREMENTS	5
TECHNICAL SPECIFICATIONS	5
MEMORY	5
APPLICATION	5
INSTALLATION	6
SEARCH THE APP STORE	6
PROGRAM LAUNCH	6
MAIN SCREEN	6
CREATE A PROFILE	7
FILL IN PROFILE FIELDS	7
EDIT OR DELETE A PROFILE	8
MISSION PARAMETERS	9
CHANGE THE TEMPERATURE UNIT	9
BOOT OPTIONS	9
DEFAULT PROFILE	9
OPERATOR	9
SENDER	9
RECEIVER	9
ADD POSITION AT START	9
DOWNLOAD OPTION	9
STOP AFTER DOWNLOAD	9
REPLACE RECEIVER AFTER DOWNLOAD	9
ADD POSITION AT STOP	9
EMAIL TO SEND PDF	9
BASIC OPERATIONS	10
START A DATA LOGGER	10
STARTUP SCREENS	10
BOOT WITH DEFAULT PROFILE	11
DELAYED START	11
SCHEDULED STOP	11
STOP AND UNLOAD THE MISSION	11
READ THE ACQUIRED DATA	11
ACCESS THE QUEST ARCHIVE	12
SHARE A MISSION	12
TECNOCLOUD	13
PRESENTATION OF THE SERVICE	13
LOGIN ACCOUNT	13
SETTINGS	13
HOW TO USE THE BUTTONS AND LED LIGHTS ON THE NFC TEMP	14

License to use

Please read the terms of this agreement carefully before using the Software. The exercise of the rights to use and duplicate the Software is subject to acceptance of the terms of this agreement.

If you do not intend to comply with the terms of this contract, you must return this package to the place of purchase as soon as possible. This agreement is between Tecnosoft s.r.l., Peschiera Borromeo (MI) - ITALY (hereinafter referred to as 'Tecnosoft') and the End User (natural or legal person) for the following software products (hereinafter referred to as 'Software'): 'TempNFC Ent' App and any other software product that accompanies it. Tecnosoft grants the end customer the limited, revocable and non-exclusive right to use one copy of the Software on one or more computers provided that the user accepts the following conditions.

1. **License to Use.** The Software is the property of Tecnosoft and may not be copied or sold without the prior written permission of Tecnosoft. The Software is protected by Italian and European laws and international treaties on intellectual property and copyright.
2. **Disclaimer.** To the extent permitted by applicable law, in no event shall Tecnosoft be liable for any direct or indirect loss or damage, including, but not limited to, loss or loss of turnover, suspension of business, loss of information, or any other economic or monetary damage resulting from the use or misuse of the Software, even if Tecnosoft has been warned of the possibility of these damages. In any case, Tecnosoft's liability shall be limited to an amount corresponding to the amount actually paid for the Software, This limitation shall apply regardless of whether the User accepts the license to use the Software.
3. **Use of Results Provided by the Software.** It is your responsibility to ensure that the results given by the Software are correct and appropriate. Under no circumstances may the Software be used in situations where its use could endanger the life or health of human beings. This clause applies regardless of whether the User accepts the license to use the Software.
4. **Updates.** If the Software is an upgrade of the previous version, the license transfers from the old version to the new version. Only the updated version can be used.
5. **Separation of components.** The Software is licensed as a single product, its components may not be separated.
6. **Limitations.** You may not convert, encode, decompile, or disassemble the Software, except as required by applicable law.

None of the information contained in this manual, nor the product described may be adapted or reproduced in any material or in any electronic form without the prior written consent of the copyright holder. This product and related documentation are provided as is, and no implied warranty is made as to their fitness for a particular purpose.

Tecnosoft s.r.l. will not accept any claim for damages that arise in any way following the use or failure of this product. Your statutory rights are not affected. This product or any variant thereof is not suitable for use in any type of medical device, apparatus or system in which the failure of the product could reasonably be expected to result in personal injury.

This document provides preliminary information that may be subject to change without notice. The publication of this document does not imply the possibility of using patents or any other intellectual property rights.

Introduction

Minimum requirements

Supported Android versions: 10 or higher

NFC: The device must be equipped with an NFC scanner

Available versions:

TempNFC: reprogrammable and reusable without limits

TempNFC Single Use: disposable, programmable up to 10 times maximum

TempNFC Calib: Reprogrammable until calibration expires, reactivates with recalibration

TempNFC RC: Reprogrammable and reusable without limits, with hard case

TempNFC RCE: reprogrammable and reusable without limits, with hard case and external probe

TempNFC RCA: reprogrammable and reusable without limits and with hard case and anti-tamper function

TempNFC RCEA: reprogrammable and reusable without limits, with hard case, external probe and anti-tamper function

Technical specifications

Dimensions (TempNFC RC and its variants): 67 X 20 X 97 (mm)

Weight: 18 g

Range temperatura: -30 °C +50 °C

Acquisition Rate: 1 second and up, in 1-second steps

Battery type: 3.0V CR2032 lithium, user replaceable (2017 IATA DGR: PI970 Section II, < 4 cells)

Disposable model non-replaceable battery

Degree of protection: IP67 (TempNFC RC and its variants) – IP65 (TempNFC, TempNFC Single Use, TempNFC Calib)

Memory

The TempNFC contains the data within it. When the memory is full it will stop recording.

Both in the hard case and in the disposable model, the memory is 3,928 acquisitions (adding notes and info the number may decrease).

Application

It allows you to manage temperature monitoring with smartphones and tablets to INSTANTLY share all the data collected. Designed in particular, but not only, for transport and monitoring of the Cold Chain.

Installation

Search the App Store

Open your App Store:



In the search bar, type: TempNFC and press enter.

Choose the blue logo and Install.

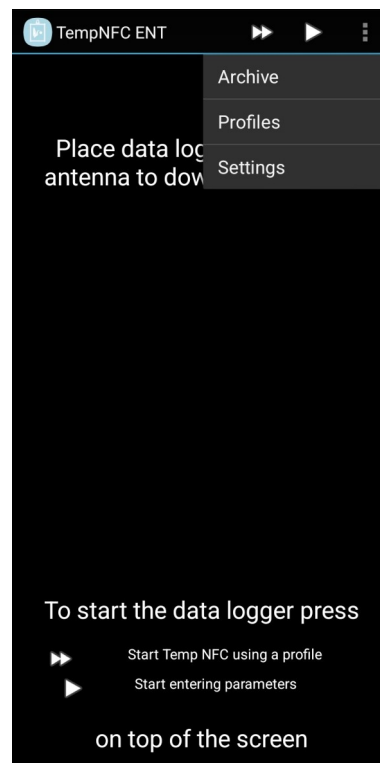
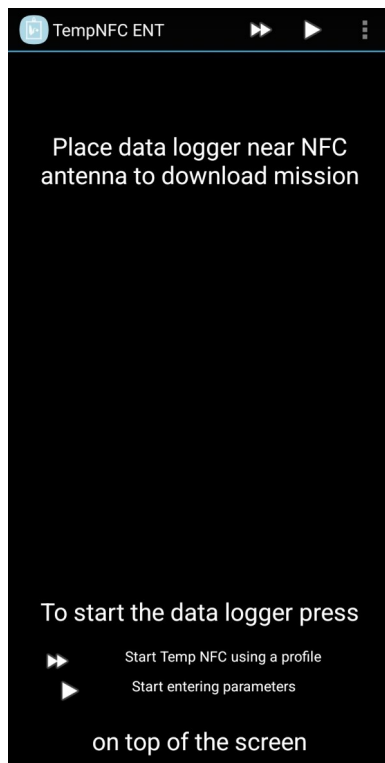


Program Launch

Launch the App and select the icon on your Android device (from your desktop or from the Apps list).

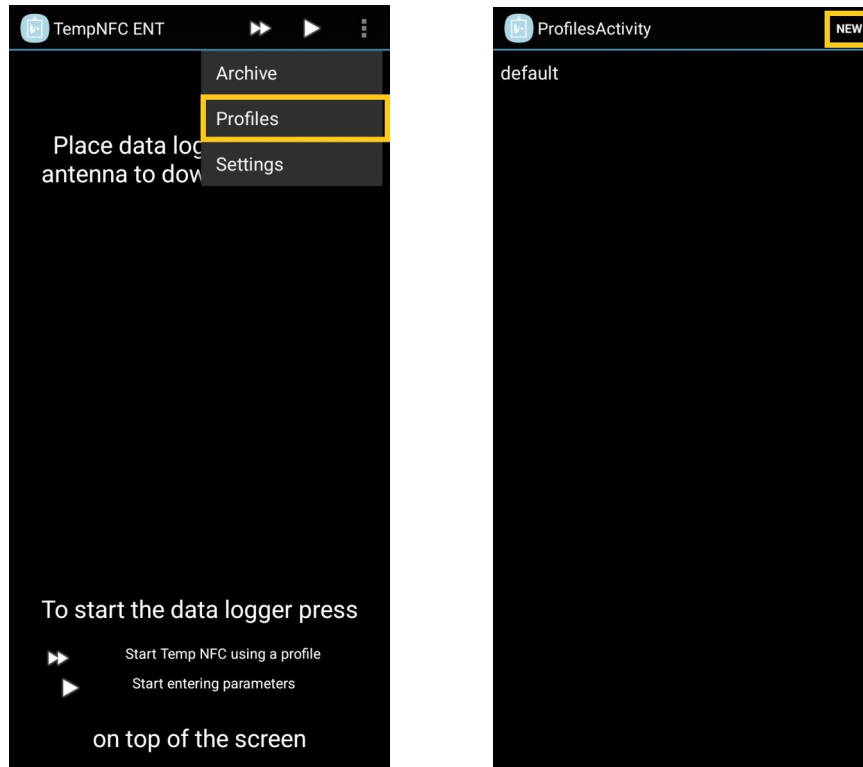
Main screen

The first main screen is also the one that allows the download of the TempNFC data loggers. The button to access the menu is located at the top right represented by the three dots. The menu has three items: **Archive**, **Profiles** and **Setting**



Create a profile

To start a Datalogger you need to configure a profile: you can create one by accessing the menu, then tap on **Profiles** and then **NEW**



Fill in profile fields

Fill in the desired profile fields:

- Name**
The profile name is the only required field with which the profile will be identified.
- Sender**
Type the default sender who sends the data loggers
- Operator**
Type the default operator that starts or transports the data loggers.
- Receiver**
Type the default receiver that receives the data loggers. If you are the recipient, enter your name or company name here.
- Note**
Enter any notes that will be included in the report.
- E-mail**
Enter the address of the sender, to whom you want to receive the PDF report. The recipient and downloader of the logger may not know the sender's email address. If the recipient still wants to receive the report, they can use this field to let the recipient know their email address.
- Items**
Field dedicated to the list of transported objects. Using the Scan button you can scan the barcodes).
- Rate**
Acquisition rate expressed in hours, minutes and seconds.
- Absolute maximum**
Threshold beyond which the monitored product is considered compromised

Maximum limit

Maximum limit taken into account for the MKT calculation

Minimum limit

Minimum limit taken into account for the MKT calculation

Absolute minimum

Threshold beyond which the monitored product is considered compromised

Activation energy

To calculate MKT you need to know the activation energy of microorganisms, if you don't know the specific value it is good to leave the default one.

Minutes to ignore at start

It refers to the initial period of time that will be excluded from the analysis, in case there are contaminations or temperature adaptations.

Minuters to ignore at end

It refers to the final period of time that will be excluded from the analysis, in case there are contaminations or temperature adaptations.

Mission maximum length (days, hours, minutes)

Maximum duration of the mission to be considered trusted. The mission will be recorded until unloaded but will present an alarm if it exceeds the set value.

ProfileEditActivity

Name

Sender Scan

Operator Scan

Receiver Scan

Note Scan

E-Mail Scan

Items Scan

Rate (hours, minutes, seconds)
0 1 0

Absolute maximum
30.0

Maximum limit
30.0

Minimum limit
10.0

Absolute minimum
10.0

Activation energy
83.0

Minutes to ignore at start
0

Minutes to ignore at end
0

Mission maximum length (days, hours, minutes)
1 0 0

Edit or delete a profile

To edit a profile, access the menu, tap on **Profiles** and press and hold on the row of the profile of interest, by doing so two options will appear: **Edit** to edit the profile or **Delete** to delete it.

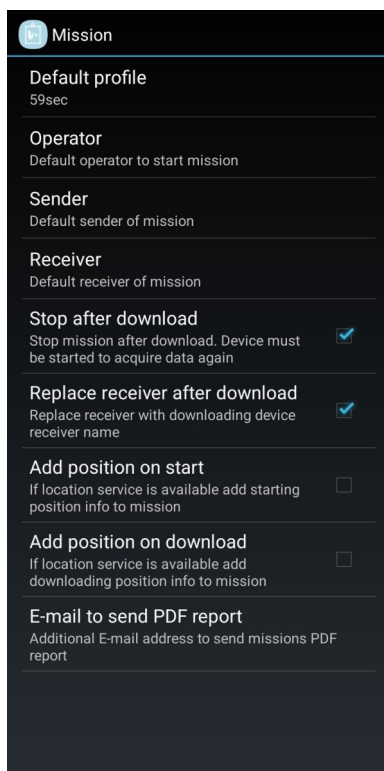
Mission Parameters

Change the temperature unit

Access the menu via the three dots and access **Settings**, select **Temperature mode** among the items, from here you can set the unit of measurement of the temperature: °C or °F (Celsius or Fahrenheit).

Boot Options

Access the menu via the three dots and access **Settings**, select **Mission** among the items, you can set some options and parameters relating to programming and downloading data. Swipe down with your finger to see all the fields.



Default profile

Select the profile that is automatically launched from the main page among those created.

Operator

Type the default operator that starts the data loggers.

Sender

Type the default sender that sends the data loggers.

Receiver

Type in the default receiver that receives the data loggers. If you are the one who receives, please enter your name or Name

Add position at start

Enable this option to save the location of start.

Download option

Stop after download

Enable this option if you want to stop captures when the data is downloaded.

Replace receiver after download

Enable this option to always replace the receiver set in the data logger with the default receiver in the configuration at the time of unloading.

Add position at stop

Enable this option to save the location of your device's GPS in the saved mission dischargeg,

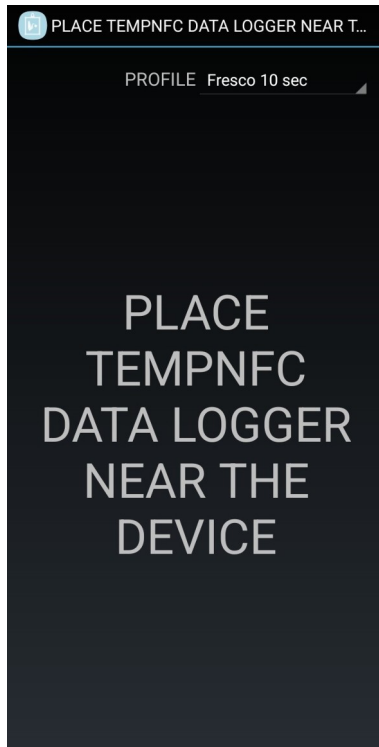
Email to send PDF

Type a default email address here to always include in the recipients to send the PDF report.

Basic Operations

Start a data logger

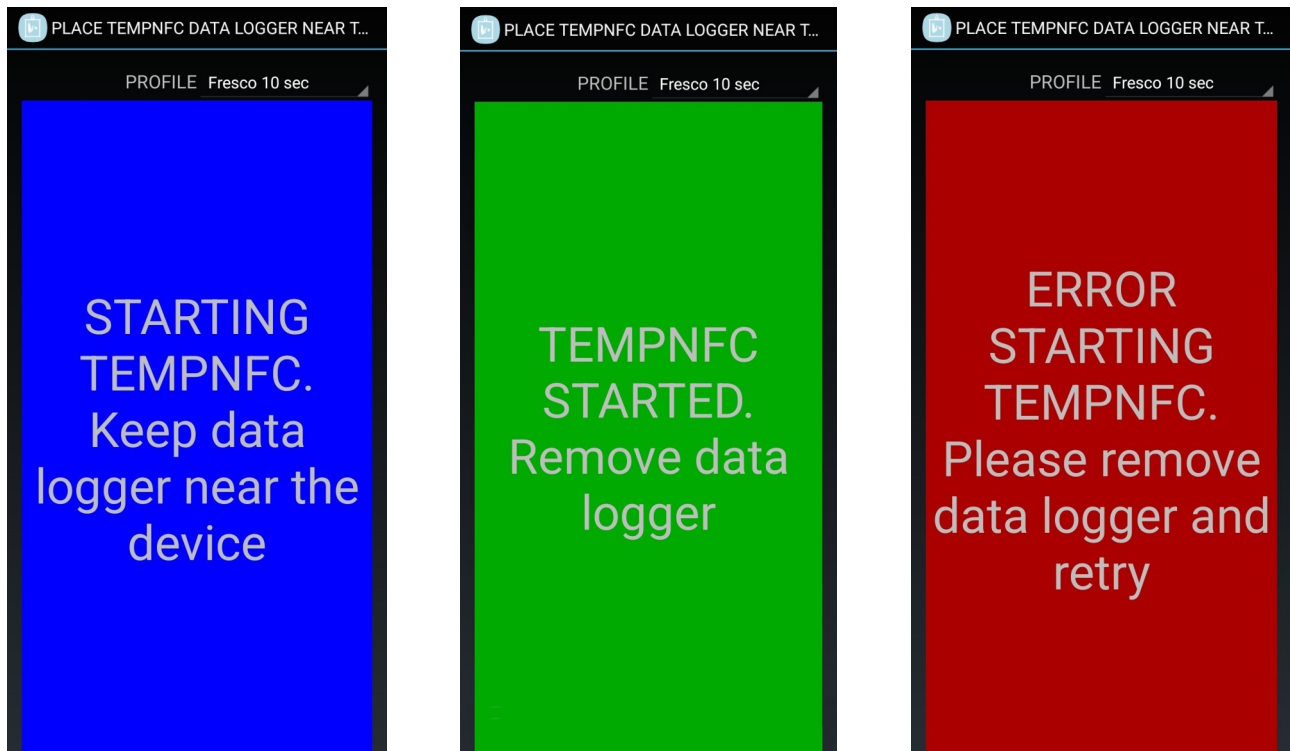
It is recommended to start a TempNFC with a profile: tap on the three dots at the top right, select Profile from the choices, tap on the desired profile in the list, by doing so you will access the pre-filled profile. By scrolling to the right you can modify or compile some parts, at the end of this operation tap on the triangle to confirm the start. This will prompt you to move the TempNFC closer to your phone to launch it.



Place the data logger with the back facing upwards, the sensor is positioned under the word "READER HERE", slide the back of the phone upwards until you feel a vibration, at which point stop and wait for the screen to evolve.

Startup Screens

When you feel the vibration during the start of the mission, the screen turns blue, wait patiently for a few seconds until you receive the result: if it turns green the data logger has been correctly started, if it turns red the NFC sensors have not coincided perfectly and you have to try again to pair the devices.



Boot with default profile

To quickly start data loggers from the home page (without selecting a profile) you need to set a default profile. Then access the menu, press **Settings, Mission, Default profile** and select the profile you are interested in from the list. This allows you to start a mission from the start screen simply with the double triangle in the top right:



Delayed Start

It is possible to program the data logger and start it manually at a later time. Access Profile via the three dots and select the profile of interest created earlier, you will then access Main Parameters.

Through Start at You can choose a date and time to start manually. Alternatively, put the check mark next to Manual start allows you to start the data logger by pressing and holding the Start on the data logger for a few seconds, until the logger flashes green for 3 seconds. To verify that the data logger is started correctly, check p. 14 of this manual.

Scheduled stop

Access Profile via the three dots and select the profile of interest created earlier, you will then access Main Parameters. A date and time for the data logger to stop automatically can be set via Stop at. It is necessary to remove the check next to Never otherwise the data logger will not stop.

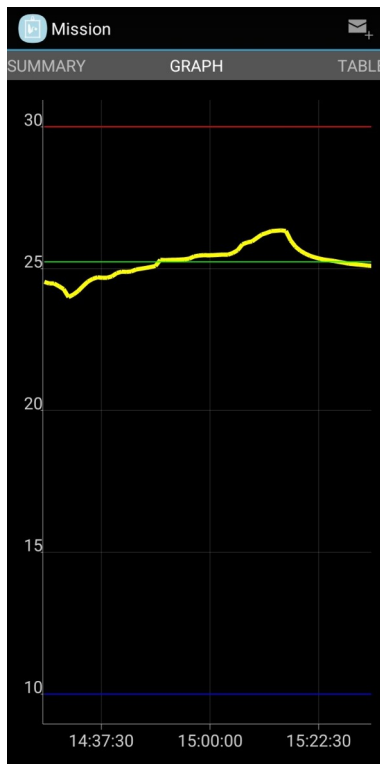
Stop and unload the mission

To download the data, access the main screen, the first that appears when opening the application with the words Place data logger near NFC antenna to download mission. Bring the TempNFC close to the phone as if to start it, when you feel the vibration stop and wait for the end of the loading, visible through the progressive bar.

At the end the result of the mission (ok or failed, based on the parameters set and the recorded data) and the data of the mission will appear

Read the acquired data

After waiting for the mission to load, the Summary page will appear with the general data of the data logger and the mission, scrolling to the left will access the graph and again to the left Table, dedicated to the acquisition details.



MISSION TABLE

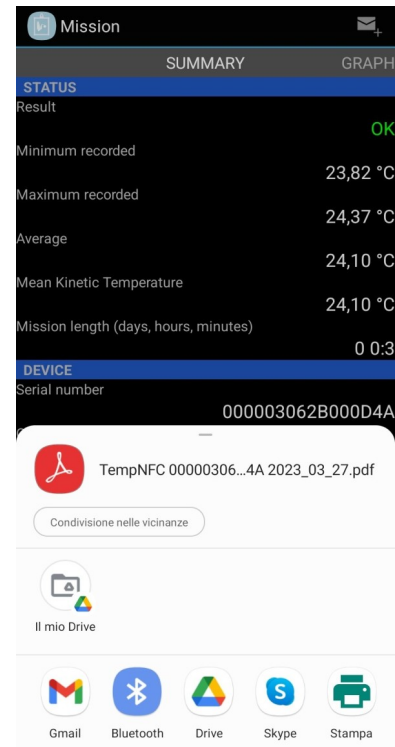
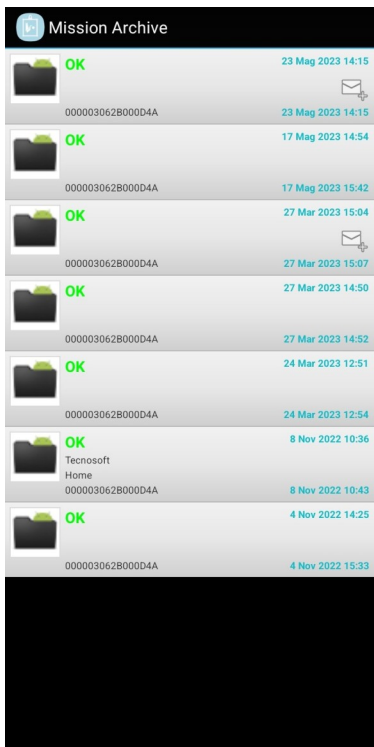
#	When	°C
1	4 Nov 2022 14:25:42	24,53
2	4 Nov 2022 14:26:42	24,48
3	4 Nov 2022 14:27:42	24,48
4	4 Nov 2022 14:28:42	24,38
5	4 Nov 2022 14:29:42	24,28
6	4 Nov 2022 14:30:42	24,00
7	4 Nov 2022 14:31:42	24,09
8	4 Nov 2022 14:32:42	24,21
9	4 Nov 2022 14:33:42	24,39
10	4 Nov 2022 14:34:42	24,54
11	4 Nov 2022 14:35:42	24,64
12	4 Nov 2022 14:36:42	24,69
13	4 Nov 2022 14:37:42	24,68
14	4 Nov 2022 14:38:42	24,68
15	4 Nov 2022 14:39:42	24,73
16	4 Nov 2022 14:40:42	24,84
17	4 Nov 2022 14:41:42	24,89
18	4 Nov 2022 14:42:42	24,89
19	4 Nov 2022 14:43:42	24,90
20	4 Nov 2022 14:44:42	24,97
21	4 Nov 2022 14:45:42	25,00
22	4 Nov 2022 14:46:42	25,02
23	4 Nov 2022 14:47:42	25,06
24	4 Nov 2022 14:48:42	25,09
25	4 Nov 2022 14:49:42	25,31
26	4 Nov 2022 14:50:42	25,30
27	4 Nov 2022 14:51:42	25,31
28	4 Nov 2022 14:52:42	25,31
29	4 Nov 2022 14:53:42	25,32
30	4 Nov 2022 14:54:42	25,33
31	4 Nov 2022 14:55:42	25,35

Access the Quest Archive

Access the menu via the three dots and tap on **Archive**, you will access the archive of downloaded missions in order from most recent to oldest

Share a mission

By downloading a mission or accessing a mission from the archive, it will be possible to share the PDF file of the mission. Press on the envelope in the upper right corner, and select the file sharing method from the available.



Presentation of the service

The Tecnosoft Cloud collects data loggers and allows you to print reports, analyze them, export them to excel and use them anywhere. By logging in via login and password you can manage your account, systems, devices and above all data. TecnoCloud is a subscription service, for more information write to: sales@tecnosoft.eu.

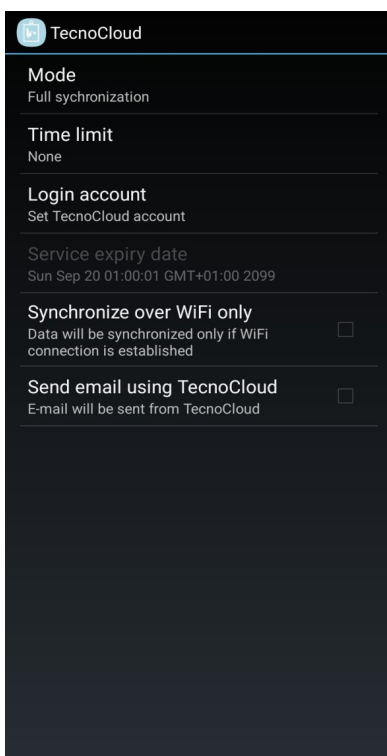
Login account

Once the Tecnosoft team has created the account and you have the credentials, first access the portal via PC and make sure that access is possible.

To connect your smartphone, then access the menu from the App via the three dots and tap on **Settings - TecnoCloud - Account login**. First enter the email and password provided by Tecnosoft and tap on **Ok** to confirm.

Settings

Through the **Settings - TecnoCloud** menu, you can access the settings:



- **Mode:** select the synchronization method between device and Cloud;
- **Time limit:** sselect the period from which it will be synchronized with the Cloud
- **Login account:** address of the account connected to the Cloud;
- **Service expiry date:** expiry date of the TecnoCloud service for the account set;
- **Synchronize over WiFi only:** Check the following item if you want to limit the synchronization and exchange of data between devices only if you are associated with a wi-fi network connection;
- **Send email using cloud:** check the following item if you want to send the email using the Cloud.

How to use the buttons and LED lights on the NFC Temp

There are two buttons: START and INFO on the sides of the data logger;

There are two colored LED lights: RED and GREEN;

By pressing the INFO button for at least 3 seconds, the device will give the following LED behavior:

1. Green and red light for 3 seconds: MEMORY FULL
2. Red light flashing for 3 times (700ms ON, 300ms OFF):
 - no data recorded;
 - acquisition in detention;
 - Wait for manual start-up.
3. Green light for 3 seconds: MISSION OK
4. Red light for 3 seconds: MISSION FAILED (temperature out of bounds, the duration of the mission has exceeded the established limit).

Pressing START for at least 4 seconds will start the logger and the LED lights will behave as follows:

1. Red light for 3 seconds: THE DEVICE CANNOT BE STARTED
 - manual start not active;
 - After the available missions have ended (for the single-use model only) or the calibration expiration date is has been exceeded (only for the TempNFC Calib model)
2. Green light for 3 seconds: LOGGER STARTED SUCCESSFULLY.

When the device is turned on (new battery or reset), the green and red LED lights will light up and the data will be stored are cleared and the default calibration is reset on the logger (the calibration is not is lost). During memory clearing, the red LED light flashes



Tecnosoft s.r.l.
Via Luigi Galvani, 4 - 20068 Peschiera Borromeo (Milano) - ITALY
e-mail: tecnosoft@tecnosoft.eu - web: www.tecnosoft.eu

UNI EN ISO 9001:2015 certified for Software development

