



YEARS OF
INNOVATION
1989-2019

TempNFC

Lite, Pro, Ent Versions

User Manual

Version 25/01/2019

**Temperature Data Logger
Control Software
TempNFC**

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7. Limitations. The user cannot convert, decode, decompile or disassemble the TempNFC App, except as expressly provided for by applicable laws.

Introduction

TempNFC is the Android App available in 3 versions to manage TempNFC temperature data loggers.

TempNFC Lite

Temp NFC Lite is the basic version of the Android App for managing TempNFC temperature data loggers. The other versions of the App are: Pro (for a fee, complete functions, without connection to the Cloud) and Enterprise (free, activated by subscription to the Tecnosoft Cloud, complete functions).

You can manage temperature monitoring with smartphones and tablets and instantaneously share all the data collected.

Features of the App

- TempNFC programming and downloading of recorded data
- Checks on exceeding thresholds and duration of transport
- Geolocation of start and stop points, saved in the mission
- Automatic sending of data in PDF reports via e-mail address pre-set by the sender and to all desired recipients

TempNFC Pro

Temp NFC Pro is the Android App for managing TempNFC temperature data loggers. The other versions of the App are: Lite (free, basic version, minimal functions) and Enterprise (free, activated by subscription to the Tecnosoft Cloud, complete functions).

You can manage temperature monitoring with smartphones and tablets and instantaneously share all the data collected.

App Features

- TempNFC programming and downloading of recorded data
- Creating mission profiles for a quick start without having to enter the parameters again
- Checks on exceeding the thresholds and duration of the transport; MKT calculation
- Bar Code and QR Code scan of products associated with transport (possibility to manually enter other information)
- Geolocation of start and stop points, saved in the mission
- Data in graphical format and table
- Additional info: sender, recipient, operator, notes
- Automatic sending of data in PDF reports via e-mail address pre-set by the sender and to all desired recipients
- Archive of collected data, saved in memory, internal, external or Dropbox

TempNFC Ent

Temp NFC Enterprise is the full version of the Android App for managing TempNFC temperature data loggers. The other versions of the App are: Lite (free, basic version, minimal functions) and Pro (for a fee, complete functions, without connection to the Cloud).

You can manage temperature monitoring with smartphones and tablets and instantaneously share all the data collected.

App Features

- TempNFC programming and downloading of recorded data
- Creating mission profiles for a quick start without having to enter the parameters again
- Checks on exceeding the thresholds and duration of the transport; MKT calculation
- Bar Code and QR Code scan of products associated with transport (possibility to manually enter other information)
- Geolocation of start and stop points, saved in the mission
- Data in graphical format and table
- Additional info: sender, recipient, operator, notes

- Automatic sending of data in PDF reports via e-mail address pre-set by the sender and to all desired recipients
- Automatic sending of data in PDF reports via email from Cloud (save traffic from your device)
- Archive of collected data, saved in memory, internal, external or Dropbox
- syncing with the Tecnosoft Cloud: download the data on the Cloud, make it accessible to anyone you want, download the missions of other devices from the Cloud to your smartphone/tablet, manage the missions wherever you are, export to Excel, create PDF reports and send them via e-mail

Features	Lite	Pro	Enterprise
Free on Google Play	✓	✗	✓ Requires Cloud subscription
Send/Download data	✓	✓	✓
Status of the mission	✓	✓	✓
Sending PDF	✓	✓	✓
Table/Graph	✗	✓	✓
Archiving missions	✗	✓	✓
Profile management	✗	✓	✓
Statistics/MKT	✗	✓	✓
Additional info when sending	✗	✓	✓
BarCode/QRCode scan	✗	✓	✓
Cloud functions	✗	✗	✓

Devices

TempNFC are temperature data loggers for transport and cold chain monitoring available in 3 versions:

- TempNFC: re-programmable and re-usable data logger without limits (also in version with rigid case);
- TempNFC Single Use: single use data logger;
- TempNFC Calib: reprogrammable data logger until calibration expires, re-activated with recalibration, to be sure not to use un-calibrated sensors.

Application fields

- Temperature controlled transport
- Environments, fridge and cold storage

Features

- Start and download data via Android NFC devices
- Long life battery; shelf life of 10 years on standby
- Possibility of manual start via the Start button
- Mission status button and LED (started, stop, OK, alarm)
- Possibility of Accredia traceable calibration certificate on one or more calibration points

System requirements

The App works on Android devices with NFC.

A device to be compatible must have these characteristics inescapably:

- Android version 4.1.2
- NFC functionality.

To see an updated list of devices actually tested with the app, visit www.tempnfc.com.

Installation

Download and install the App directly from Google Play.

TempNFC Lite

<https://play.google.com/store/apps/details?id=com.tecnosoft.tempnfc-lite>



TempNFC Pro

<https://play.google.com/store/apps/details?id=com.tecnosoft.tempnfc-pro>



TempNFC Ent

<https://play.google.com/store/apps/details?id=com.tecnosoft.tempnfc-ent>



TEMPNFC LITE

Basic operations - Lite

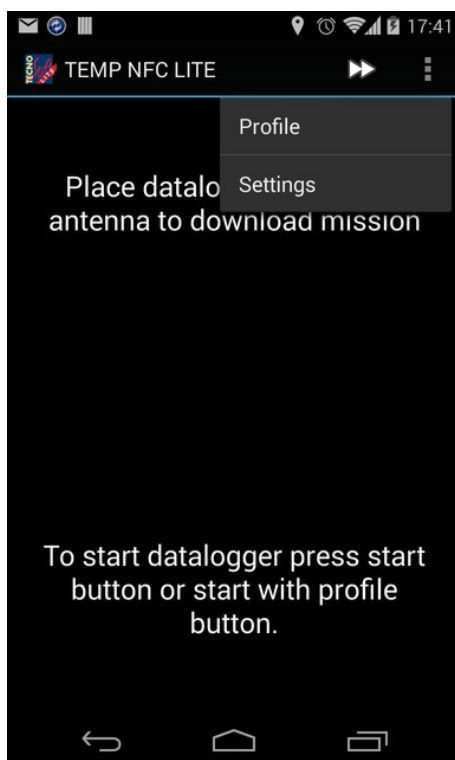
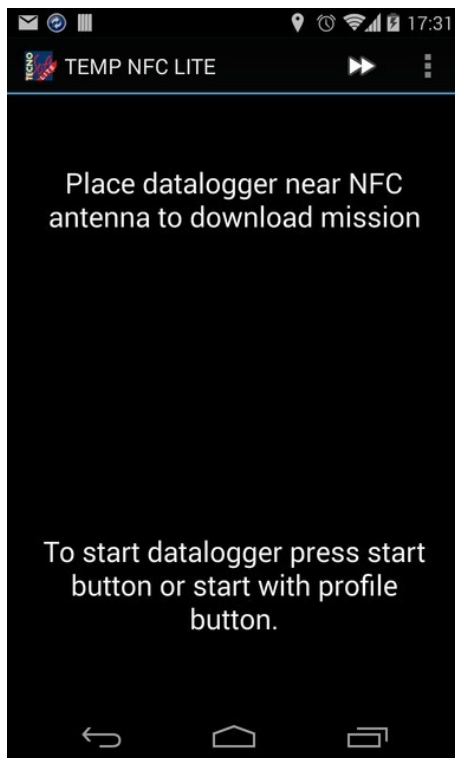
Program Launch

Start the App by selecting the icon on your Android device (from the desktop or from the App list).

Main screen

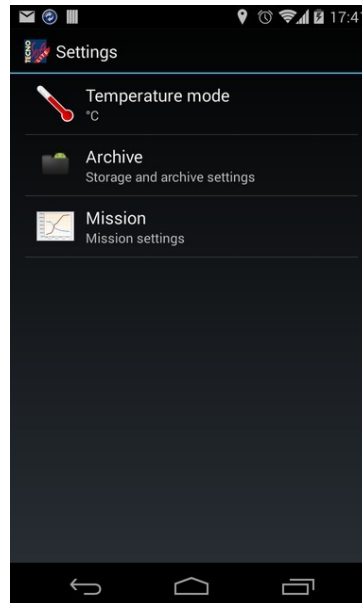
The main screen is also the one that allows the data to be downloaded from the TempNFC data loggers. The button to access the menu could be placed at the top right or you need to use the default button of your phone (located on the opposite side to that of "Back" button).

The menu has two entries: Profiles and Settings.



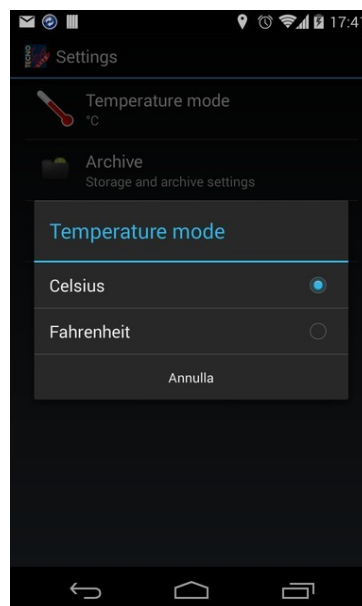
Configuration - Lite

Select the menu and then Settings to open the configuration screen.



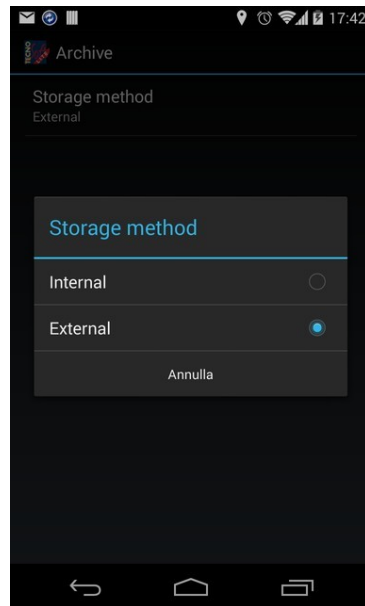
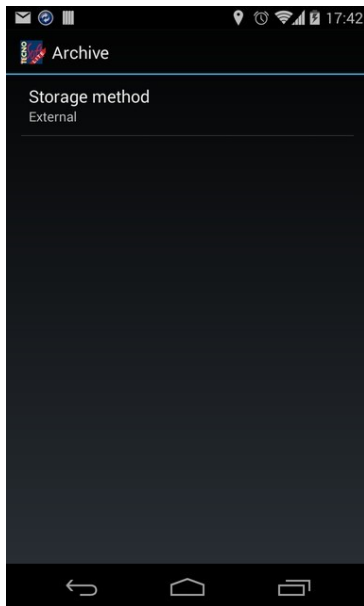
Temperature Mode

By selecting the first item you can set the unit of measurement of the temperature: °C or °F (*Celsius* o *Fahrenheit*).



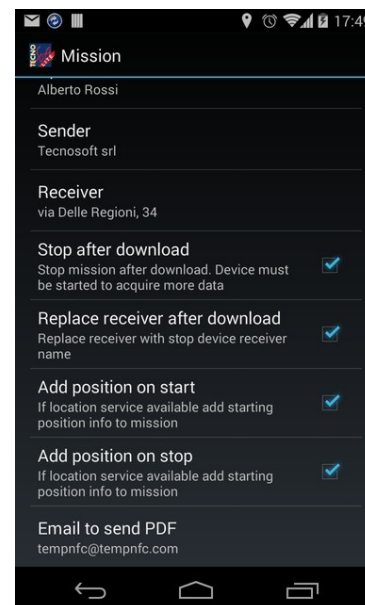
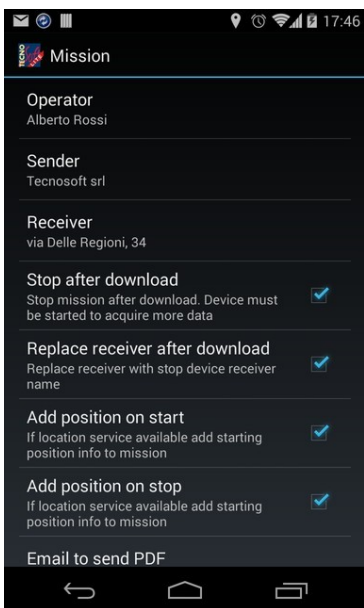
Archive

In Archive, you can set the storage location of PDF files by selecting Storage method: internal memory or external memory (recommended).



Mission

In Mission you can set several options and parameters related to programming and downloading data. Scroll down to see all the fields.



Operator

Type the default operator that starts the data loggers.

Sender

Type the default sender that sends the data loggers.

Receiver

Type the default receiver that receives the data loggers. If you are the one to receive, enter your name or company name here.

Stop after download

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

Replace receiver after download

Enable this option to always replace, when unloading, the receiver set in the data logger with the receiver set by default in configuration (see above).

Add position at start

Enable this option to save in the data logger, via the GPS of your device, the starting position.

Add position at stop

Enable this option to save the downloaded position in the saved mission via the GPS of your device.

Email to send PDF

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

Profile - Lite

It is possible to set default parameters for the start of the data loggers, in the Profile section. Open the main menu and select Profile.

The screenshot shows the 'ProfileEditActivity' screen. At the top, there is a status bar with the time 13:32 and various icons. Below the status bar, there is a title bar with the text 'ProfileEditActivity' and a save icon. The main content area contains several fields with labels on the left and 'Scan' buttons on the right:

- Name:** default (This field is not editable in the Lite version)
- Sender:** TecnoSoft
- Operator:** (Empty)
- Receiver:** (Empty)
- Note:** (Empty)
- E-Mail:** (Empty)
- Items:** (Empty)

Below these fields, there is a section for 'Rate (hours, minutes and seconds)' with three input fields: 0, 1, and 0. At the bottom, there is a field for 'Mission maximum length' with the value 83. The screen also shows a save icon at the top right.

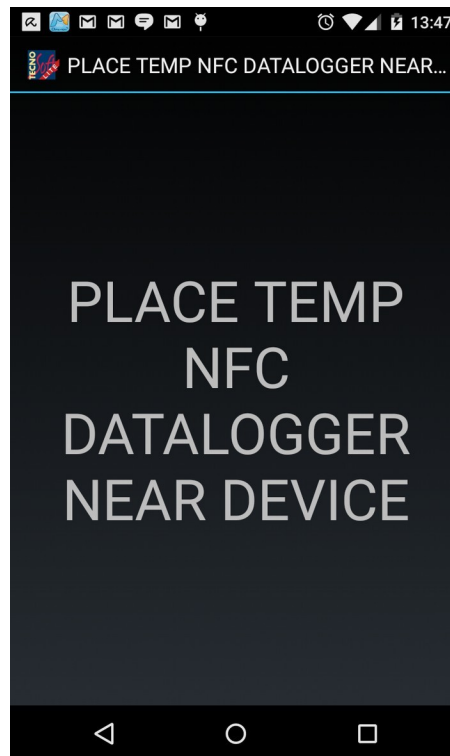
In the Lite version it is not possible to create multiple programming profiles so the Name field cannot be changed and the default name remains.

The other fields (e.g. all you can press on Scan to scan a QR code or a barcode) are:

- Sender
- Operator (operator who programs the logger)
- Receiver
- Notes
- E-mail: sender's email address, on which you want to receive the report in PDF format
- Items: list of transported objects (it is advisable to scan the barcodes if any)
- Rate: acquisition rate, expressed in hours, minutes and seconds
- 4 thresholds (minimum and maximum, minimum and maximum absolute): for the evaluation of the curve once the data has been downloaded
- Activation energy: for the calculation of the MKT, leave 83 if you do not know the exact value
- Minutes to ignore at starts: minutes to discard (but still recorded) for the calculation of the MKT, at the beginning
- Minutes to ignore at end: minutes to discard (but still registered) for the MKT calculation at the end
- Mission maximum length: maximum duration of the mission Press on the disk at the top right to save the new settings.

Start a data logger - Lite

To start loggers using the parameters set in Profile, press on Start, in the main screen, at the top right (>>).

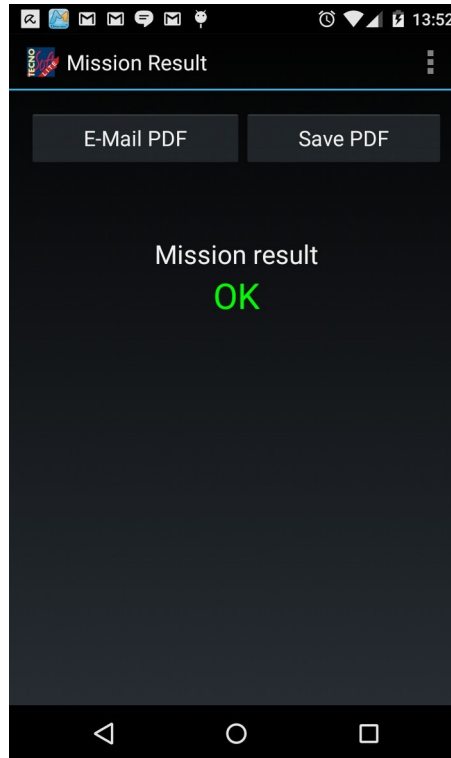


Bring the NFC Temp closer to the NFC antenna of your phone (**attention! Each phone has the NFC antenna positioned at different points, usually on the back**) and do not move it away until the screen turns blue to green. If it turns red, repeat the operation, being careful not to move the logger.

At this point the logger is ready to send.

Read the acquired data - Lite

To download the data bring the NFC Temp closer to the NFC antenna of the phone (**attention! Each phone has the NFC antenna positioned in different points, usually on the back**) and do not move it away until the end of the loading, visible through the progress bar.



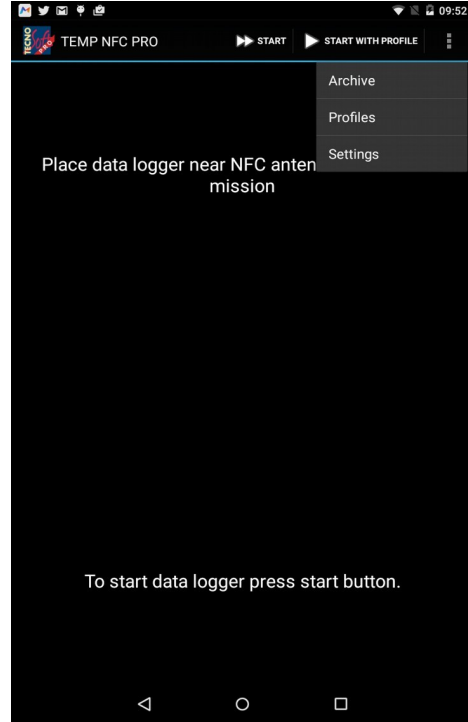
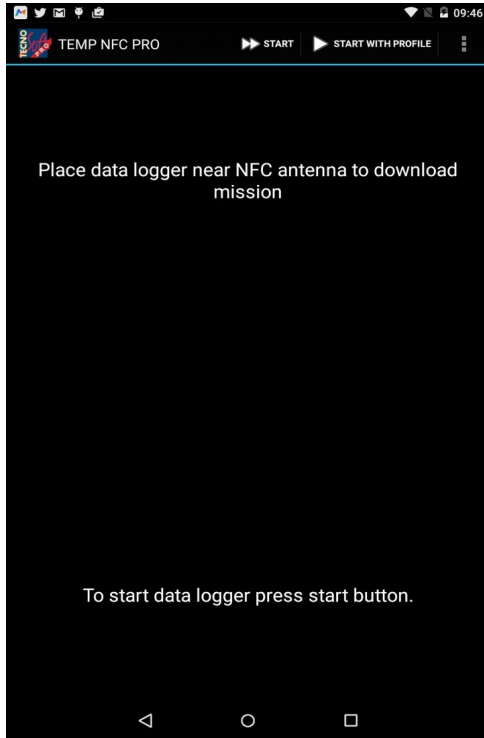
At the end, the result message of the mission will appear (ok or failed, based on the set parameters and the recorded data) and at this point two operations are possible, send the PDF file (E-Mail PDF) or save the PDF file (Save PDF).

TEMPNFC PRO

Basic operations - Pro

Main screen

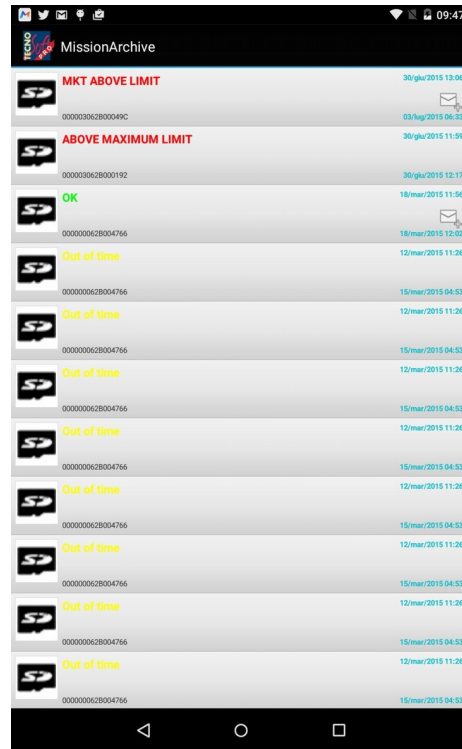
The main screen in addition to allowing data logger download as in the Lite version, has other features.



Runs Display - Pro

Selecting the first item in the Archive menu will show all the various Runs that have been made by the data logger.

Press it to open the page with all the technical data or hold it down to delete, send or export the PDF file of the mission (Delete - Export - Send).

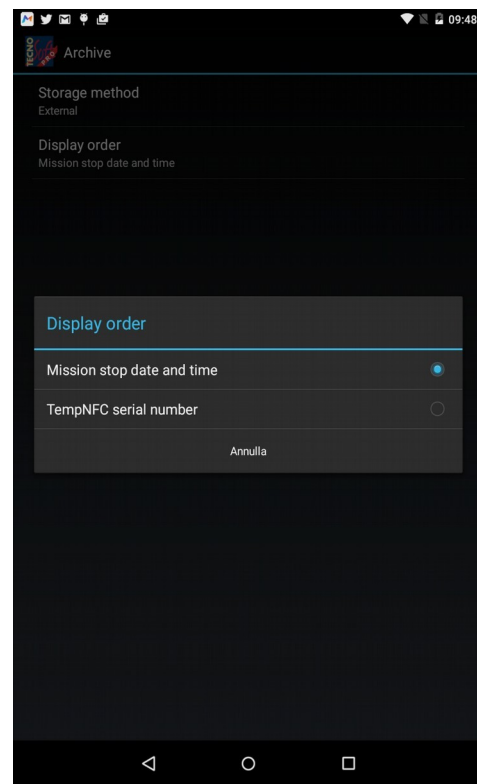
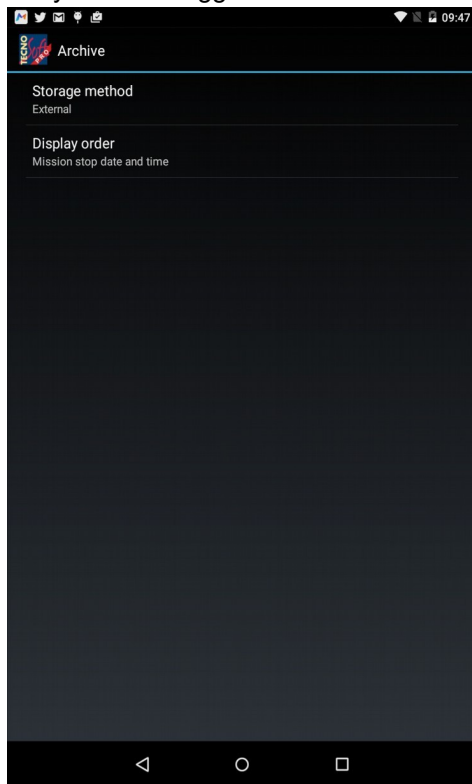


Configuration - Pro

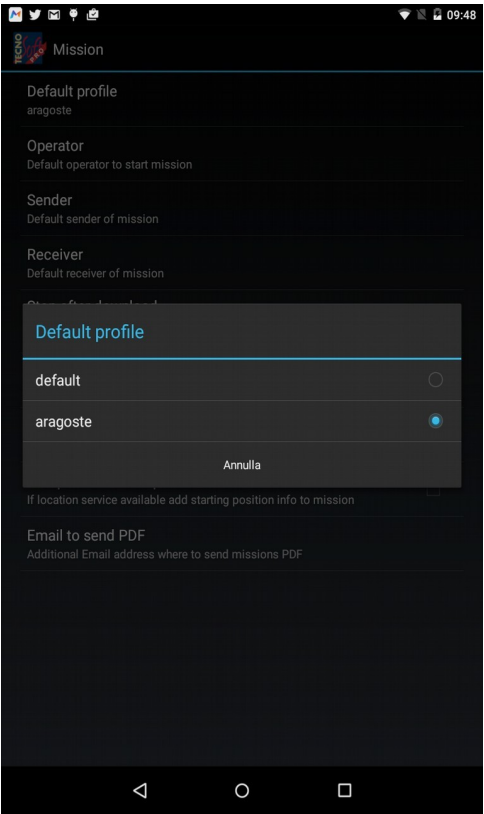
Archive

Select the Settings item in the menu for configuration and enter Archive.

In the second item Display order on the screen it is possible to select the storage mode of the Runs made by the data logger: mission end date - serial number order of succession.

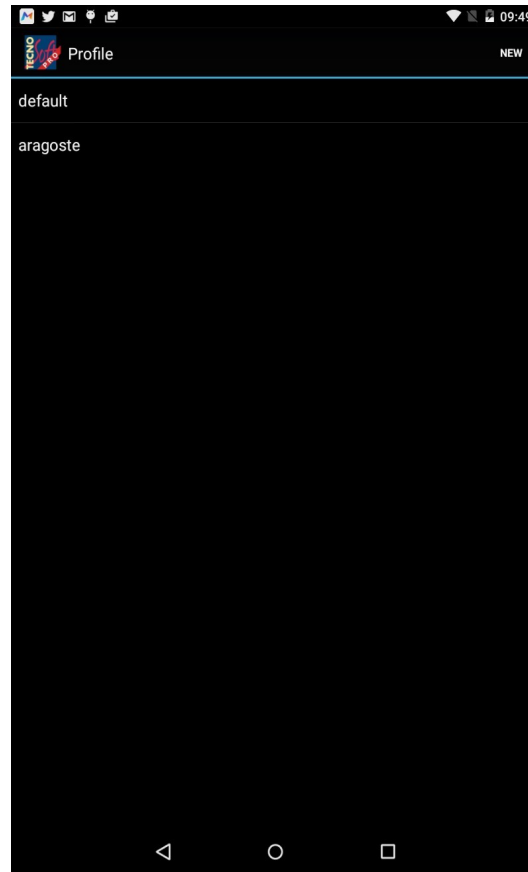


When accessing Mission there is a new option compared to the Light version called Default profile and it allows you to select the default profile with which you can start loggers.



Profiles - Pro

Select the Profiles item in the menu to open the screen that allows you to window all the various profiles created. If you press and hold the text or simply enter the profile you can edit it or delete it (Edit - Delete). You can generate a new profile on this page by filling in the various default parameters, which will then be shown on the previous screen.



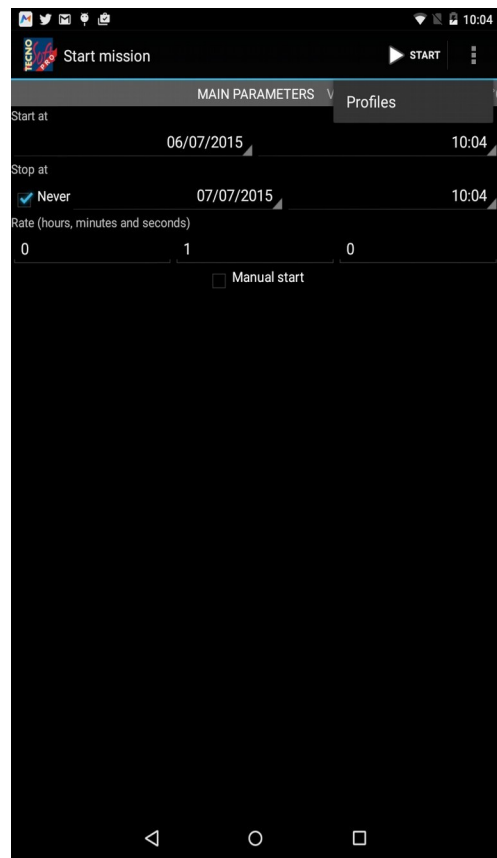
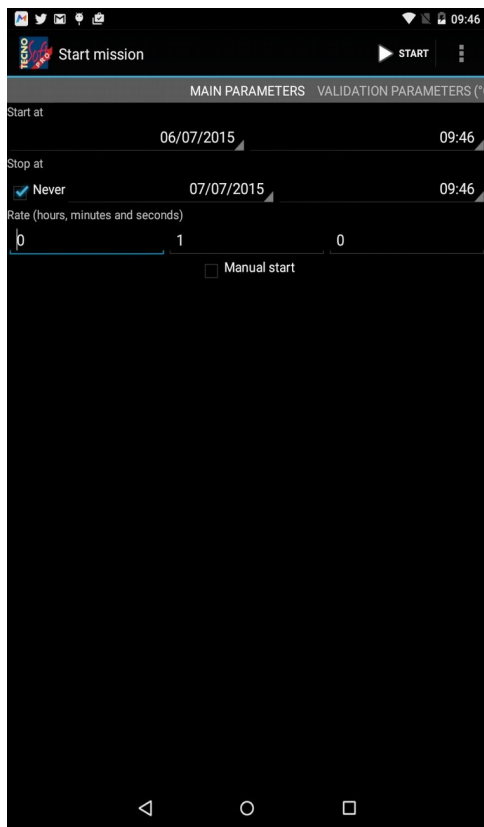
Start a data logger - Pro

With this application, the device can be started in two ways.

Start the data logger with the default profile previously set by pressing the double arrow at the top right, this to allow a quick start.

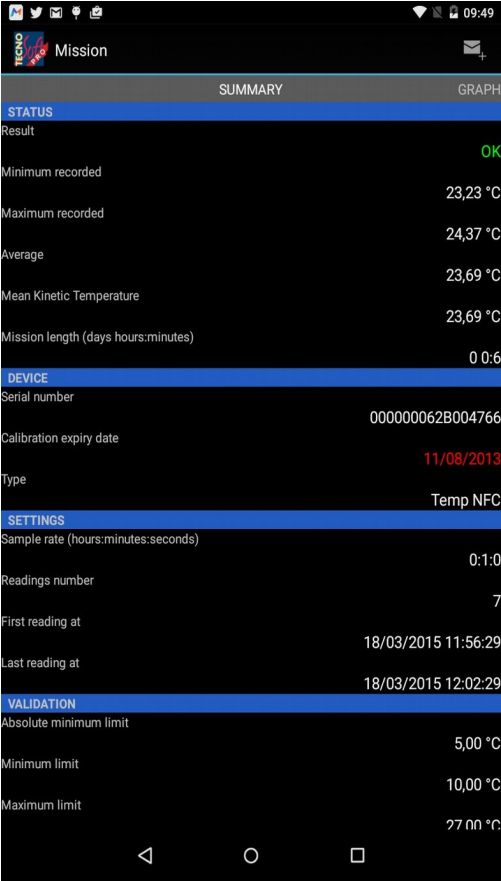
Pressing START WITH PROFILE or the single arrow at the top right will allow you to: change the mission start and end date and time, the acquisition time (hours, minutes, seconds) and ticking the item Manual start the date start of the mission will be synced with the start of the logger.

Stay on this screen to start the devices with another profile, opening the menu and entering Profiles. Now you can choose the profile you want.



Read the acquired data - Pro

After waiting for loading with the neighbouring devices for communication, the Summary page will appear with the technical data of the data logger, the temperature graph, and always scrolling the page to the left, all the temperature values recorded by the logger.

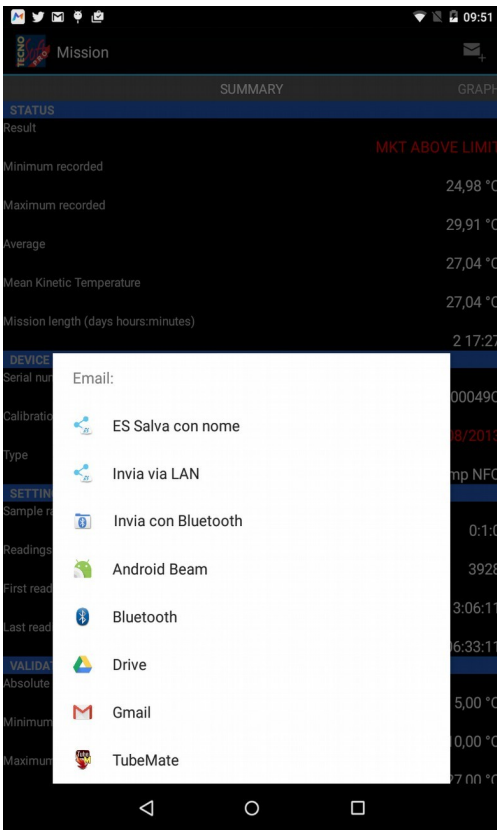


MISSION

TABLE

#	When	°C
1	12/mar/2015 11:21:01 AM	20,90
2	12/mar/2015 11:22:01 AM	21,29
3	12/mar/2015 11:23:01 AM	21,48
4	12/mar/2015 11:24:01 AM	21,63
5	12/mar/2015 11:25:01 AM	21,76
6	12/mar/2015 11:26:01 AM	21,79
7	12/mar/2015 11:27:01 AM	21,87
8	12/mar/2015 11:28:01 AM	21,90
9	12/mar/2015 11:29:01 AM	21,90
10	12/mar/2015 11:30:01 AM	21,90
11	12/mar/2015 11:31:01 AM	21,88
12	12/mar/2015 11:32:01 AM	21,88
13	12/mar/2015 11:33:01 AM	21,88
14	12/mar/2015 11:34:01 AM	21,87
15	12/mar/2015 11:35:01 AM	21,88
16	12/mar/2015 11:36:01 AM	21,88
17	12/mar/2015 11:37:01 AM	21,87
18	12/mar/2015 11:38:01 AM	21,87
19	12/mar/2015 11:39:01 AM	21,86
20	12/mar/2015 11:40:01 AM	21,86
21	12/mar/2015 11:41:01 AM	21,86
22	12/mar/2015 11:42:01 AM	21,86
23	12/mar/2015 11:43:01 AM	21,85
24	12/mar/2015 11:44:01 AM	21,85
25	12/mar/2015 11:45:01 AM	21,85
26	12/mar/2015 11:46:01 AM	21,85
27	12/mar/2015 11:47:01 AM	21,84
28	12/mar/2015 11:48:01 AM	21,85
29	12/mar/2015 11:49:01 AM	21,85
30	12/mar/2015 11:50:01 AM	21,84
31	12/mar/2015 11:51:01 AM	21,85
32	12/mar/2015 11:52:01 AM	21,85
33	12/mar/2015 11:53:01 AM	21,85
34	12/mar/2015 11:54:01 AM	21,85
35	12/mar/2015 11:55:01 AM	21,84

Pressing the "envelope with a +" symbol at the top right will send the file obtained by various types.

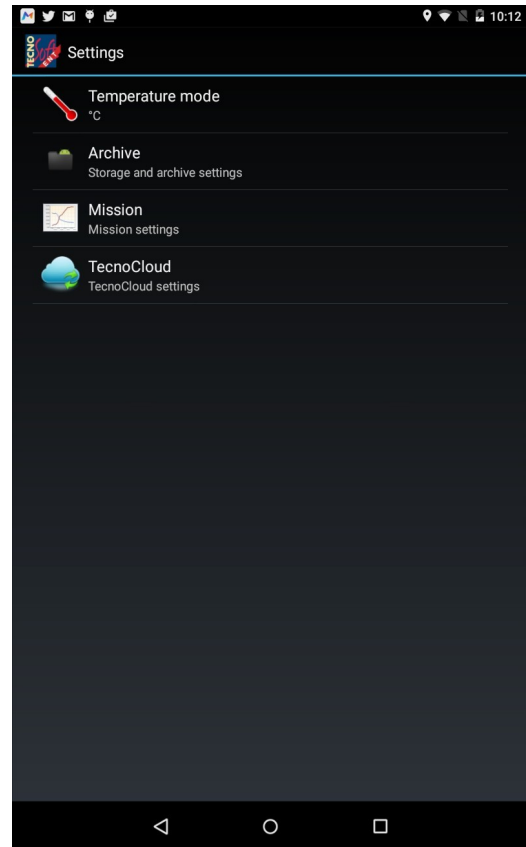
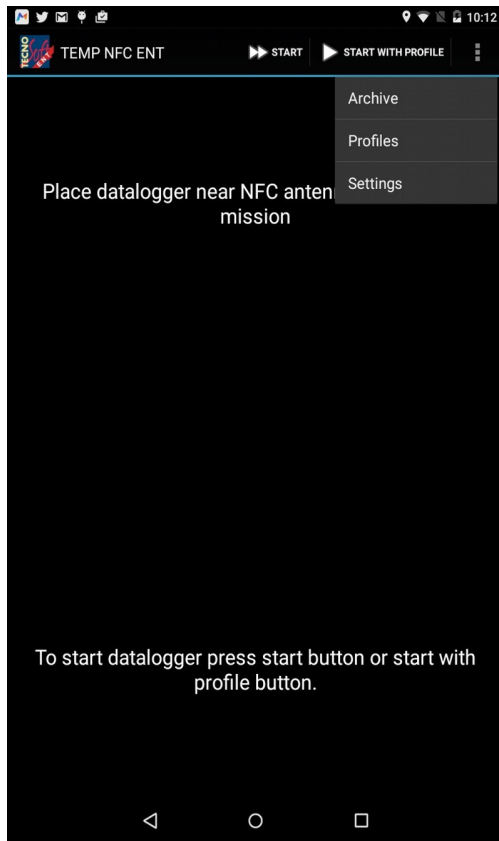


TEMPNFC ENT

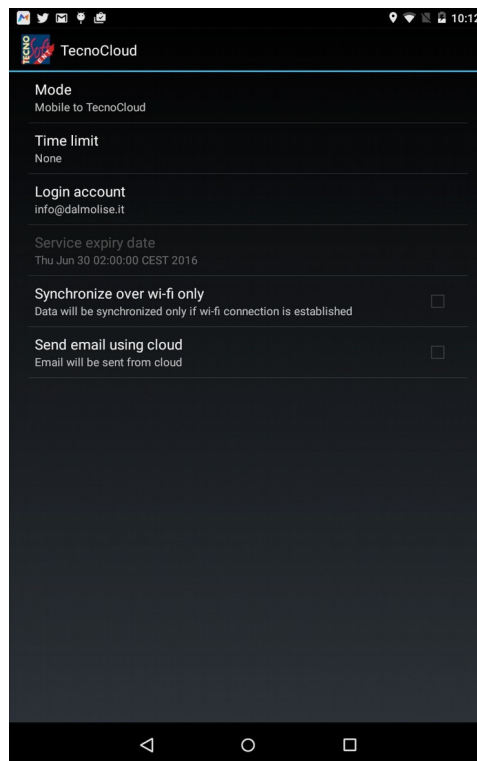
TecnoCloud - ENT

The TEMP NFC ENTERPRICE application is very similar to the TEMP NFC PRO because they have the same complete functions.

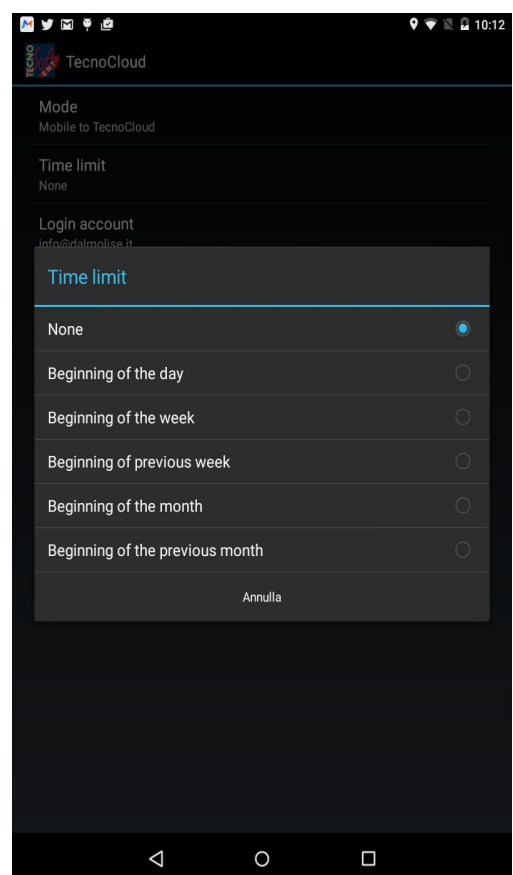
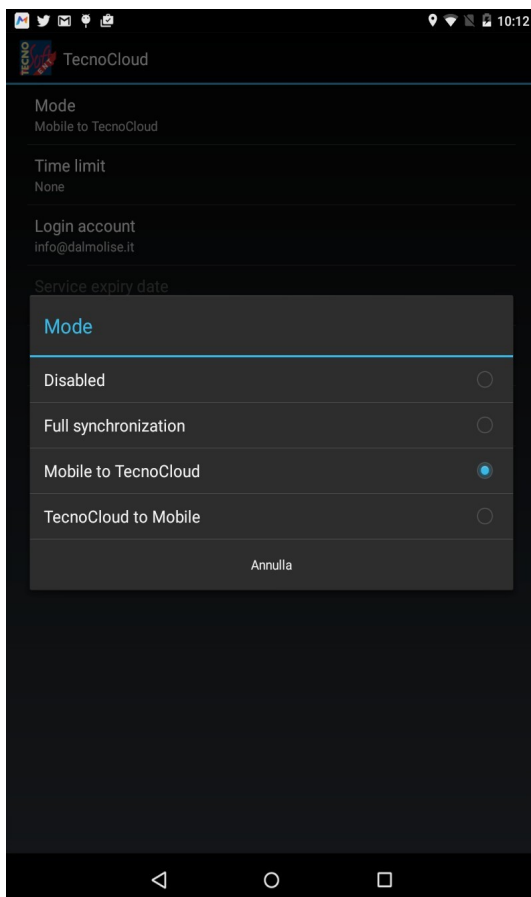
The only difference can be found in the Settings menu with the voice TecnoCloud; that is, it is possible to connect to the Cloud for saving and assigning files and data.



Enter the TecnoCloud item to manage the settings connected to it:



- Mode: select the synchronization method between device and Cloud;
- Time limit: select the period from which it will be synchronized with the Cloud;
- Login account: address of the account connected to the Cloud;
- Synchronize over wi-fi only: check the following item if you want to limit the synchronization and exchange of data between the devices only if you are associated with a Wi-Fi network connection;
- Send email using cloud: check the following entry if you want to send the email using the Cloud.



HOW TO USE BUTTONS AND LED LIGHTS OF TEMP NFC

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

the data logger; There are two coloured LED lights:

RED and GREEN;

By pressing the INFO button for at least 3 seconds the LEDs on the device will act as follows:

1. Green and red light for 3 seconds: FULL MEMORY
2. Red light flashing 3 times (700ms ON, 300ms OFF):
 - no recorded data;
 - acquisition in standby;
 - wait for manual start.
3. Green light for 3 seconds: MISSION OK
4. Red light for 3 seconds: MISSION FAILED (out of limit temperature, 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 completing the available missions (only for the single use model) or the expiration date has been set (only for the TempNFC Calib model)
2. Green light for 3 seconds: LOGGER STARTED CORRECTLY.

When the device is switched on (new battery or reset), the green and red LED lights will light up and the stored data will be deleted and the default calibration will be restored to the logger (calibration will not be lost). The red LED light flashes when deleting the memory.



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