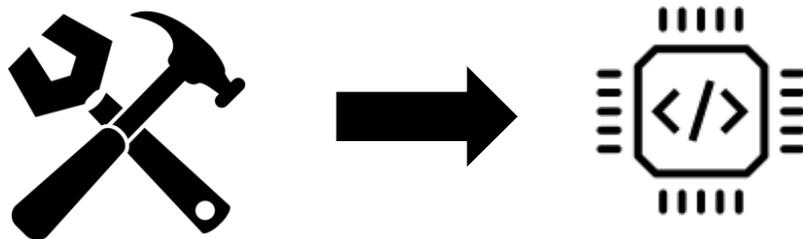


ExpoM – RF 4

Firmware Release Notes

Document Release 1.3 (24.02.2021)



Contents

1 Introduction	3
2 Release Descriptions	4

1 Introduction

This Document describes the modification history of the ExpoM-RF4 Utility. It describes new added features and known and also resolved issues that has impact on the customers experience.

2 Release Descriptions

Release #	Description
1.13	<ul style="list-style-type: none"> - Resolved Issue: When turning the device on in some cases there were a long pause until the LED started to light up, giving the feeling that something is wrong. This issue is now solved. - Resolved Issue: In rare cases the integrated SD card was malfunctioning because of a too fast start-up procedure.
1.12	<ul style="list-style-type: none"> - Resolved Issue: On certain ExpoM-RF4 the front LED didn't work correct (e.g. when connected to the utility the LED was shining blue instead of pink and the red light could hardly be recognized when sampling). <p>Background: In release 1.11 the LED driver got reworked so that the intensity of the front LED could be adjusted (so far by firmware only). It occurred that this didn't work reliably on all hardware so this feature got disabled again at least for the short term.</p>
1.11	<ul style="list-style-type: none"> - Resolved Issue: It turned out that the SD-Card insertion observation is malfunctioning giving wrong feedback (SD-Card seemed not to be inserted even it was). This observation was part of the system check during start-up leading in a reboot if it fails. Consequently the device remains in a rebooting loop. This observation has now been turned off. If the SD-Card is faulty or really not inserted this is still detected during actively accessing the SD-Card. - Modification: Improved power management so that the device is able to measure 24 h (before < 15 h) by battery with GPS on (at 25 defined bands and an interval of 10 s). Having the GPS deactivated the device lasts for more then a week (before about 40 h).
1.9	<ul style="list-style-type: none"> - Resolved Issue: Issues got visible when messages were transmitted that caused the CPU of the device to be busy for a while (about > 2.73 ms). Trying to communicate with the device then ended in a communication error. A readiness message is implemented so that the client (computer) can check if the device is responsive. - Resolved Issue: When modifying the logger settings the sensitivity will now be adapted to the scan settings. If the default logger settings are loaded the sensitivity will be adapted as well. - Resolved Issue: Battery Charger needs to be reset at start-up. Reason: Device suddenly refused to charge. This is because the battery charger is never turned off (unless the battery runs low) causing the charging safety

	<p>timer to steps in. To avoid this the registers of the battery charger will be reset at start-up before writing dedicated settings.</p> <ul style="list-style-type: none"> - Resolved Issue: Download got interrupted time by time (usually very rarely, once very often hardly to bring it down). This issue could be back traced to an unspecified carriage return symbol sent at the end of every packet which is now removed. - Resolved Issue: Restarting after system got shut down due to low battery and turned on after a while is now avoided. - Resolved Issue: Charging current is now increased from 1.0 A to 1.5 A. Before it was reduced to 1.0 A about 40 seconds after the device got (re-)started. - Resolved Issue: if no logger bands were defined in the logger settings the device loads the default settings saved inside the device. This process failed leaving the device without any bands defined. Error mode occurred right after the device was started up (it disappeared again after bands were defined manually.)
1.0	<ul style="list-style-type: none"> - Initial Release