

# RELEASE NOTE FOR MODEMS ARF868

## APP FW 1.7.0 OR 2.1.0

### CONCERNED PRODUCTS

The following products already contain this FW version:

- **ARF7940AAN:** ARF868 ULTRA LONG RANGE 500MW RADIO MODEM INT. ANTENNA
- **ARF7940BAN:** ARF868 ULTRA LONG RANGE 500MW RADIO MODEM EXT. ANTENNA
- **ARF7941AAN:** ARF868 LONG RANGE 500 MW RADIO MODEM INT. ANTENNA
- **ARF7941BAN:** ARF868 LONG RANGE 500 MW RADIO MODEM EXT. ANTENNA
- **ARF7942AAN:** ARF868 MIDDLE RANGE 25MW RADIO MODEM INT. ANTENNA
- **ARF7942BAN:** ARF868 MIDDLE RANGE 25MW RADIO MODEM EXT. ANTENNA
- **ARF7943AAN:** ARF868 LOW POWER 25MW RADIO MODEM INT. ANTENNA
- **ARF7943BAN:** ARF868 LOW POWER 25MW RADIO MODEM EXT. ANTENNA
- **ARF7940AAP:** ARF868 ULTRA LONG RANGE 500MW RADIO MODEM INT. ANTENNA
- **ARF7940BAP:** ARF868 ULTRA LONG RANGE 500MW RADIO MODEM EXT. ANTENNA
- **ARF7941AAP:** ARF868 LONG RANGE 500 MW RADIO MODEM INT. ANTENNA
- **ARF7941BAP:** ARF868 LONG RANGE 500 MW RADIO MODEM EXT. ANTENNA
- **ARF7942AAP:** ARF868 MIDDLE RANGE 25MW RADIO MODEM INT. ANTENNA
- **ARF7942BAP:** ARF868 MIDDLE RANGE 25MW RADIO MODEM EXT. ANTENNA
- **ARF7943AAP:** ARF868 LOW POWER 25MW RADIO MODEM INT. ANTENNA
- **ARF7943BAP:** ARF868 LOW POWER 25MW RADIO MODEM EXT. ANTENNA

Version 1.7.0 is embedded in index "N" and version 2.1.0 in index "P" due to a change of microcontrollers in our new production batch.

### SUMMARY

This version adds the possibility to verify the quality of the radio link between a modem and an other modem in remote or a repeater in remote.

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# CHANGES COMPARED WITH FW VERSION 1.6.0 (794xAAM AND 794xBAM)

## 1.1 In general

Version 1.7.0 or 2.1.0 embed new registers that enables MODEM to be compatible with the new feature of the Stand-Alone configuration Manager (Version 2.2.8) to make a Radio Link Test (RLT) between 2 MODEMS remotely (or a MODEM and a REPEATER).

## 1.2 Registers

Add registers:

- S257: Loopback feature management (On, Off, only on MW detection)
- S258: Magic Word: (from 0000 0000 to FFFF FFFF) Determine by the user the magic word allows the remote modem to identify the frame to be repeated for the Radio Link Test.

## 1.3 New frame with Magic Word

To make a Radio Link Test the modem linked to the Configuration Manager will send a frame beginning by a chosen Magic Word.

The remote MODEM (or Repeater), when the RLT function is activated, detects this frame with the right Magic Word and repeats it by RF instead of giving it on the serial link as for standard data.

**N.B:** in this context, a frame beginning not voluntarily by the magic word could be lost.

# HOW TO PERFORM THE RLT

To perform the Radio Link Test, you need:

- MODEM with firmware 1.7.0 or 2.1.0\*
- To activate the RLT function on your modems
- The Configuration Manager 2.2.8

To know how to perform the RLT test please refer to the section “Radio Link Test” of the annex 2.2.8 of the User Guide version of the Stand-Alone Configuration Manager.

\*To know which version you have and how to benefit from this new version please contact our support team through the helpdesk platform: <https://adeunis.freshdesk.com/en/support/tickets/new>