Release Notes
RM186 and RM191

RM186 Version 18.4.1.0 and RM191 Version 17.4.1.0

This document provides release notes for RM186 firmware version 18.4.1.0 and RM191 firmware version 17.4.1.0.

Release notes are a summary of new and enhanced features, resolved issues, and known issues that are not resolved in this version. Consult the User's Guide for details on the features of this software release.

- Firmware Version 18.4.1.0 (RM186) AND 17.4.1.0 (RM191)
- Firmware Version 18.4.0.26 (RM186) AND 17.4.0.26 (RM191)

FIRMWARE VERSION 18.4.1.0 (RM186) AND 17.4.1.0 (RM191)

Released October 2016

Third-party software:
- Nordic SoftDevice version: S120 1.0.0
- LoRa Stack version: STACKFORCE 4.3.0

Updates

The following changes have been made for this release:

- Updated LoRa Stack to 4.3.0
- As part of stack update, if JoinRequest fails, the module automatically resends the JoinRequest.
- Changed the ids for DevEui, AppEui, AppKey, NwkSKey, AppSKey, and DevAddr. AppKey, NwkSKey and AppSKey are now write only. This is to close a potential security problem. All existing modules must be reconfigured with the new ids.
- Added in new LoramacSetOption() parameter to allow the user to modify the datarate for the 2nd Rx window. This avoids a problem with the iot.semetech.com website where they still use the old value of DR_3 for this window.
- Bug fix - BLE bonding now works.
- Bug fix – LoramacGetOption() now outputs the correct values for AppEui and DevEui.
- ChannelsMask value can now be obtained in the RM191.
- Added new events for the TxDone signal, ADR command from the gateway, and when a receive window times out.

Embedded Wireless Solutions Support Center:
http://ews-support.lairdtech.com
www.lairdtech.com/wireless

34

© Copyright 2015 Laird. All Rights Reserved

Americas: +1-800-492-2320
Europe: +44-1628-858-940
Hong Kong: +852 2923 0600

- New debug *smart*Basic command which outputs text that reports the frequency on which a packet is transmitted. It also provides waveform output to two SIOs marking when the module is in transmit or receive mode.
- Can now alter the number of times the module attempts to resend a confirmed packet. The default value is eight attempts but it can be set lower. The stack allows a maximum value of eight so if a higher value is entered, it's clipped.
- Removed the RM191 hybrid option and now let user set the ChannelsMask. Option is not limited to Multitech's sub-band option. There is now an at+cfgex option which is read at initialization and overwrites the default setting of the bottom 8 frequencies (sub-band 1). If the config option is not set, then the default option remains. There is also a runtime LoraMacSetOption which modifies the ChannelsMask. This method is not persisted. After a reboot or power cycle, the module defaults to the default or at+cfgex value.

Known Issues

- Initial reading from analog GPIO input is incorrect. (9121)
- When using Personalisation, the first downlink packet doesn't appear to contain any payload data if the server is set up to reflect any received data. This is due to the incorrect handling of the sequence counter.

FIRMWARE VERSION 18.4.0.26 (RM186) AND 17.4.0.26 (RM191)

Released April 2016

Third-party software:
- Nordic SoftDevice version: S120 1.0.0
- LoRa Stack version: STACKFORCE 4.1.0

Initial Release

This is the initial firmware release for the RM1xx radios. The following features are part of this release:

- LoRaWAN support for Class A devices – Version 1.0.1
- Bluetooth v4.0

Known Issues

- Initial reading from analog GPIO input is incorrect. (9121)

Embedded Wireless Solutions Support Center:
http://ews-support.lairdtech.com
www.lairdtech.com/wireless

34

© Copyright 2015 Laird. All Rights Reserved

Americas: +1-800-492-2320
Europe: +44-1628-858-940
Hong Kong: +852 2923 0600