

## Product Change Notification

# MultiConnect<sup>®</sup> mDot<sup>™</sup> MultiConnect<sup>®</sup> xDot<sup>™</sup> Long Range RF Modules



Date: September 11, 2018

### I. Product Change Notification Number

PCN 091118-00

### II. Impacted Products

This Product Change Notice applies to all [MultiConnect<sup>®</sup> mDot<sup>™</sup>](#) and [MultiConnect<sup>®</sup> xDot<sup>™</sup>](#) ordering part numbers.

### III. Type of Change/Highlights

New firmware (FW) release and updated software libraries on mbed.org.

#### Highlights

- Added support for Multicast messages
- Added support for Firmware-Update-Over-the-Air (FUOTA) updates (mDot only)
- Added a bootloader for xDot models (mDot already supported this feature)
- New channel plans for Korea and India

### IV. Key Date

First Date of Manufacture (DOM): 2018.08.28

All mDot and xDot models with a DOM of 2018.08.28 or later will ship from the factory with the new 3.1.0 FW installed.



## V. Current and New Firmware Versions

Old FW Version: 3.0.0

New FW Version: 3.1.0

Download new FW here: <http://www.multitech.net/developer/downloads/>

Download new AT command guide here:

<https://www.multitech.com/documents/publications/manuals/s000643.pdf>

Download new xDot developer guide here:

<http://www.multitech.com/documents/publications/manuals/s000645.pdf>

Download new mDot developer guide here:

<https://www.multitech.com/documents/publications/manuals/S000612.pdf>

## Release Notes

### Changes

- Added support for firmware update over the air updates (FUOTA) (mDot only)
- Added support for multicast messages
- Added auto sleep support for sleeping between Rx windows
- Added support for IN865 (India), KR920 (Korea) channel plans
- Store AppEUI and AppKey in protected settings
- Upgraded to Mbed OS 5.7.7
- ADR enabled by default
- Default setting changed to LoRaWAN Public Network Mode
  - **Note: Previous FW defaulted to Private MTS Network Mode**
- Added bootloader support for xDot

### Bug Fixes

- AS923 reduce min frequency to cover New Zealand 915-928 MHz
- Add downlink channel settings for Rx1 in EU, IN and KR
- Channel Plan: EU868 default channels support only DR0-5
- Mac Commands buffer fixes, buffer will clear properly
- Negative Antenna gain functions correctly now
- AT&F now changes dots to class A
- LBT now uses AT+TXF for testing at a fixed frequency
- Added Info logging for wrong packet received information (wrong address, mic failure)
- Suppress some trace logging to avoid stack overflow
- Allow default channels to be disabled with a LinkADRReq MAC command
- Add support for DChannelReq MAC command for all applicable channel plans
- Added locking for SPI write mDot, now thread safe
- AU915: DR0-6 support
- Open Rx window on wakeup in Class C mode
- Fix for backward compatibility for 1.0 and 2.0 dot libraries

## VI. libmDot Updates (Mbed libraries for the mDot and xDot)

Please see [mbed.org](https://os.mbed.org) for a list of updates at the following link:

<https://os.mbed.com/teams/MultiTech/wiki/Dot-firmware-change-log>

To download latest Dot Libraries please go here: <http://www.multitech.net/developer/downloads/>

## VII. Additional Information

If you have any questions regarding this Product Change Notification, please contact your MultiTech sales representative:

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