

PCN #: 2015-02-03**Change title: Adding security features to STM 3xy / STM 250 modules.****Date of publication: March 9, 2015**

Products affected / EnOcean ordering codes

- STM 330 / S3001-D330
- STM 331 / S3001-D331
- STM 320 / S3001-D320
- STM 329 / S3001-D329
- STM 250 / S3101-C250

Description of change

- Added enhanced security mode in addition to actual standard mode.
- Enhanced security features include: AES 128 Payload encryption, Protection against replay attacks & message forgery by RLC counter and message authentication (CMAC).
- Factory mode is standard mode. Customers who do not require using enhanced security mode, can continue to use module as before in standard mode.
- By long press of LRN Button (10 Sek) the module can be switched from standard to secure mode and back at any moment.
- Mode change can be explicit disabled by configuration parameter. (Only STM 331 & STM 330).
- Added security parameters e.g. AES Key & RLC to configuration interface (Only STM 331 & STM 330).
- Removed possibility to configure the behavior of WAKE 0 – LRN Button (Falling and Rising edge) (Only STM 331 & STM 330). Behavior set to falling edge – press of the button.

- EEP Teach-In can be transmitted without additional configuration, EnOcean Manufacturer ID is set as default for teach-in (Only STM 331 & STM 330).
- EEP A5-02-30 Temperature sensor -20 – 62,3 °C & Humidity can be configured (Only STM 331 & STM 330).

Milestones

- Pre-change products: last guaranteed order until June 30, 2015, then depending on remaining stock
- Post-change products: order acceptance from April 1, 2015

Reason for change

- Add security mode to enable security features to protect communication against eaves dropping and replay and forgery attacks. Raise the security confidence of EnOcean radio networks.

Step codes after change



- STM 330 DD
- STM 331 DD
- STM 320 DD
- STM 329 DD
- STM 250 EB

Customer impact of change and recommended action

- LRN Button behaviour changed.
- Add description of Security and LRN Button behaviour to user manual of final product.

Reference Documents / Attachments

- STM 33x User Manual
- STM 32x User Manual
- STM 250 Data Sheet

PCN revision history

Date of revision	Author	Revision number	Reason
February 3, 2015	MH	00	Original PCN