RM186 LoRa – Setting the communication keys with AT commands

In loRa communication, the keys are set to either OTAA or ABP. Now we use “Over-the-Air Authentication” (OTAA), so we only need: **AppEui**, **DevEui** and **AppKey** on the device. Other keys / addresses are automatically set up at the server.

Setting The Keys – using OTAA (Over-the-Air Authentication)

The default value is used for the DevEui. This avoids duplicate use of device addresses.

Setting the values for: AppEui and AppKey

Define AppEui (8 Bytes)

Run command:

at+cfgex 1010 “xxxxxxxx”

eg at+cfgex 1010 "12345678"

Define AppKey (16 Bytes)

Run command:

at+cfgex 1012 “xxx…xxx”

eg. at+cfgex 1012 "12c87fc0da000001"

Query for DevEui (8 Bytes)

A global value for DevEui is preset. The command 'ati 25' returns the global value. Run command:

ati 25

The entered keys will only be effective after a manual restart.
Run command:

atz

EXTRA: Define custom DevEui (8 Bytes) – NOT RECOMMENDED

If you want to change a custom DevEui for the device, it can be defined.

at+cfgex 1011 “xxxxxx” – NOTE! This command would set a custom DevEui. Do not use.

EXTRA: Setting the Keys – using ABP (Activation by Personalization)

AppEui, DevEui, and AppKey are sufficient when OTAA (Over-the-Air Authentication) is used.

When using "Activation by Personalization" (ABP), you must also set device-specific settings for: Network Session Key (NwkSKey), Application Session Key (AppSKey), and End Device Address (DevAddr).

The commands for defining these values are following.

NwkSKey (16 bytes)

at+cfgex 1013 “xxx.xxxx”

AppSKey (16 bytes)

at+cfgex 1014 “xxx.xxx”

DevAddr (4 bytes)

at+cfgex 1015 “xxxx”

esim. at+cfgex 1013 "2b7e151628aed2a6abf7158809cf4f3c"