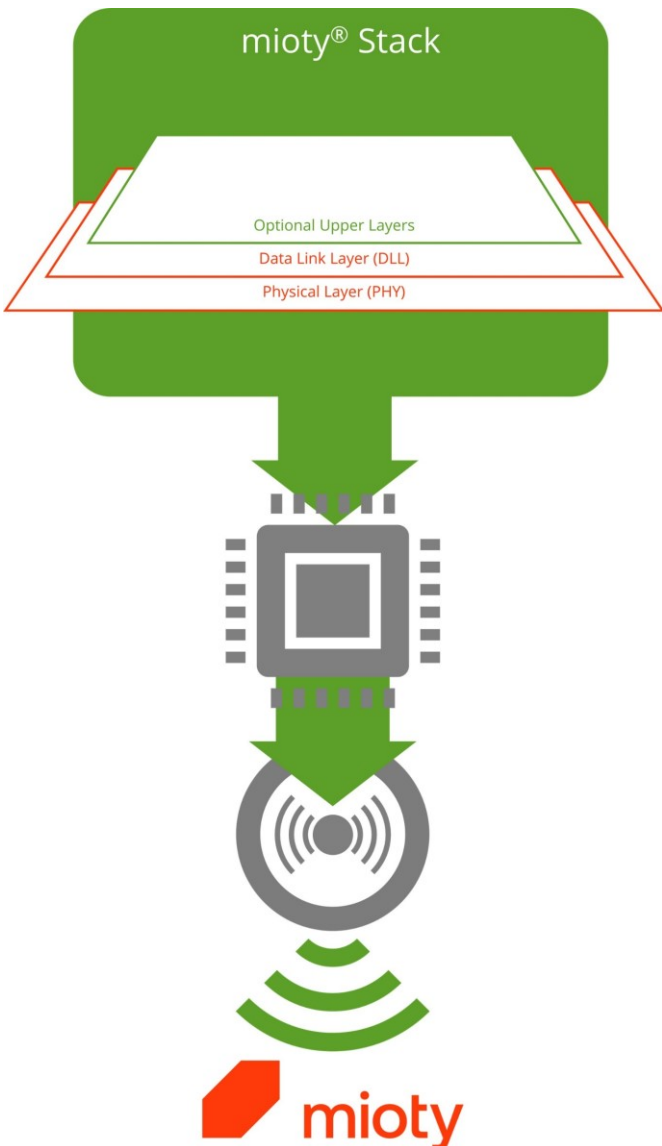
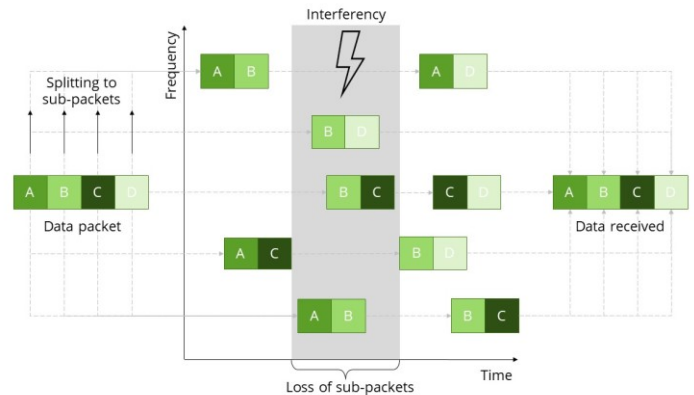


# mioty<sup>®</sup> Protocol Stack

The STACKFORCE mioty<sup>®</sup> Protocol Stack is an extremely efficient and robust solution for common Low Power Wide Area Networks (LPWAN) and concentrated industrial networks.

With the innovative, asymmetric transmission method based on telegram splitting, it sets new standards in robust and secure wireless data transmission for a wide range of applications.

## TELEGRAM SPLITTING



Compliant to  
 ETSI Standard  
 TS 103 357 TS-UNB v1.1.1



Excellent robustness and  
 long range due to the  
 innovative telegram  
 splitting technology



High scalability with up to  
 1.5 millions of messages  
 per day using a single  
 mioty<sup>®</sup> base station



Pre-certification on  
 reference hardware  
 platform

## SUPPORTED SPECIFICATIONS

Compliant according

- ETSI TS 103 357 TS-UNB v1.1.1

## STACK FEATURES

- Class A & Z
- Uni- and bidirectional transmission
- Profiles: EU0 / EU1 / EU2 / US0 / IN866 (depending on hardware platform)
- Stationary or mobile operation up to 120 km/h
- Operation modes:
  - Standard
  - Retransmission
  - Low-Latency
- Optimized power consumption by interrupt driven state management and exclude polling

## REFERENCE HARDWARE

**STM32L0 + SX127x  
CC13x0**

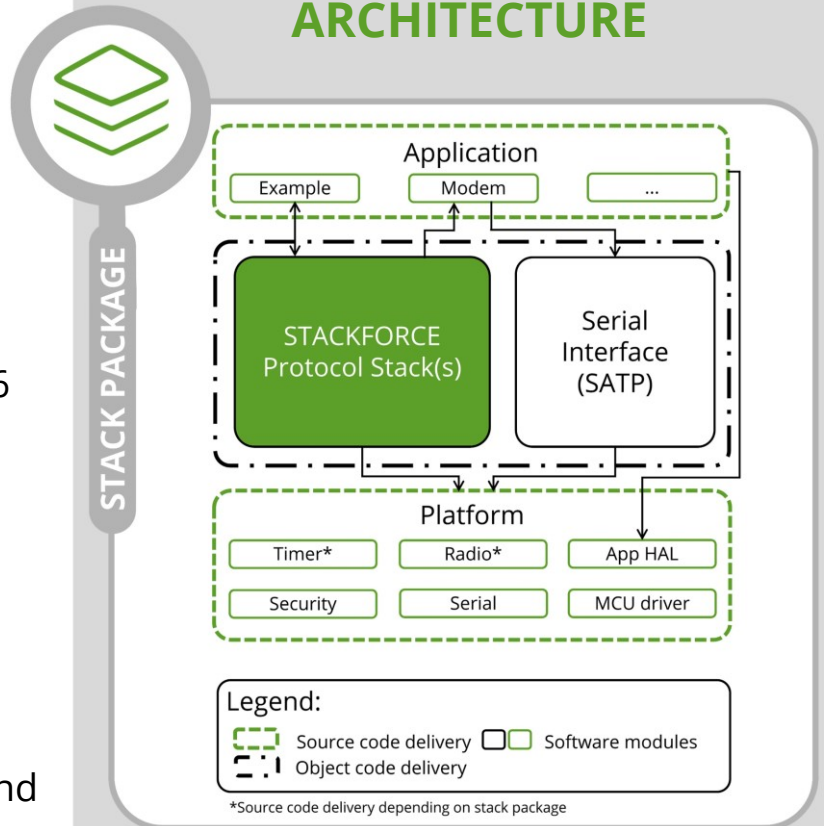
## STACK CHARACTERISTICS

Memory requirements\*

	STM32L0SX127x [unidir]	CC13x0 [bidir]
Flash	~ 40 kB	~ 80 kB + 15 kB TI RTOS
RAM	~ 13 kB	~ 10 kB +8 kB TI RTOS

\* The code sizes described above specify the typical required memory for operating the full featured protocol stack as a library including related drivers. Values based on reference hardware.

## STACK PACKAGE ARCHITECTURE



## YOUR BENEFITS



Prepared for multi protocol applications: with flexible and well-proven multi stack API for seamless migration to other protocol stacks, e.g. OMS<sup>®</sup>, LoRaWAN<sup>®</sup>



Example application allowing an easy start-up of the stack



Support for use in conjunction with common embedded operating systems (OS), such as TI RTOS or OS-less use (bare metal)



Professional support and long-term maintenance and availability