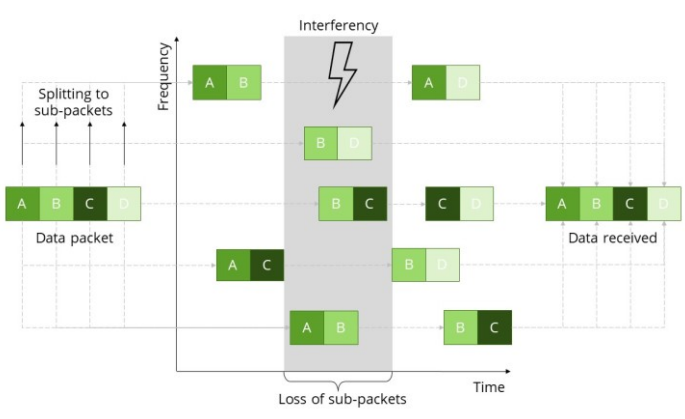
STACKFORCE
embedded.connectivity.solutions

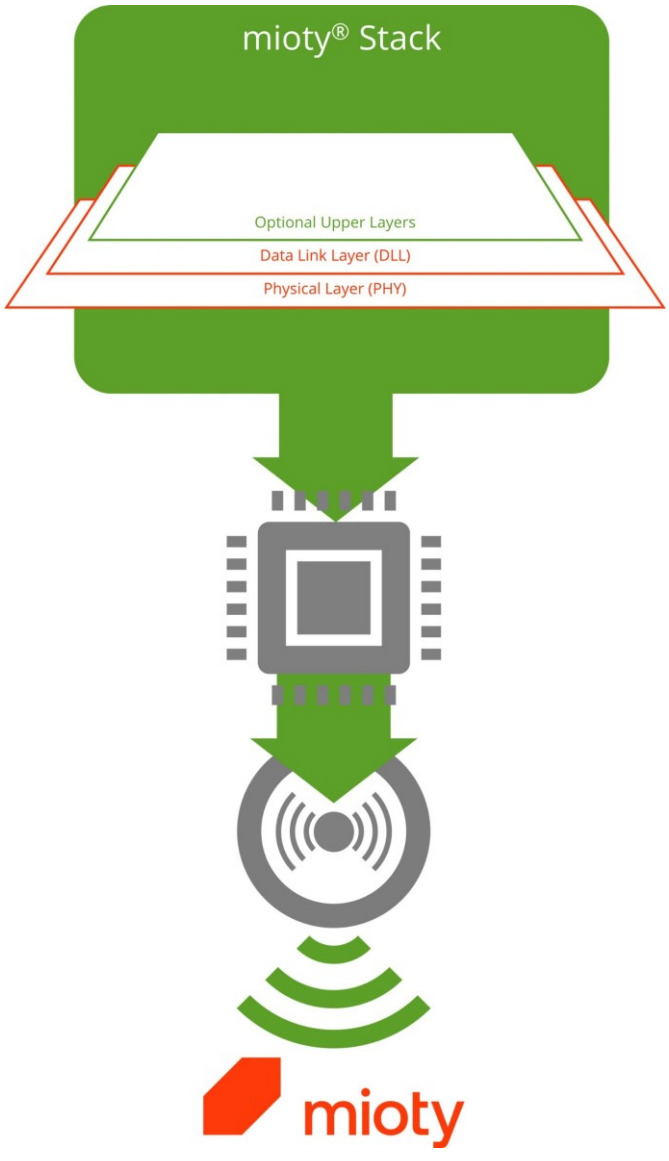
mioty® v1.1.1 for End Devices

The STACKFORCE mioty® 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® 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[1]
- Uni- and bidirectional transmission[1]
- 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

[1] Depending on hardware platform

REFERENCE HARDWARE

- CC13x0
- CC13x2
- STM32L0 + SX127x
- STM32WL5/STM32WLE5

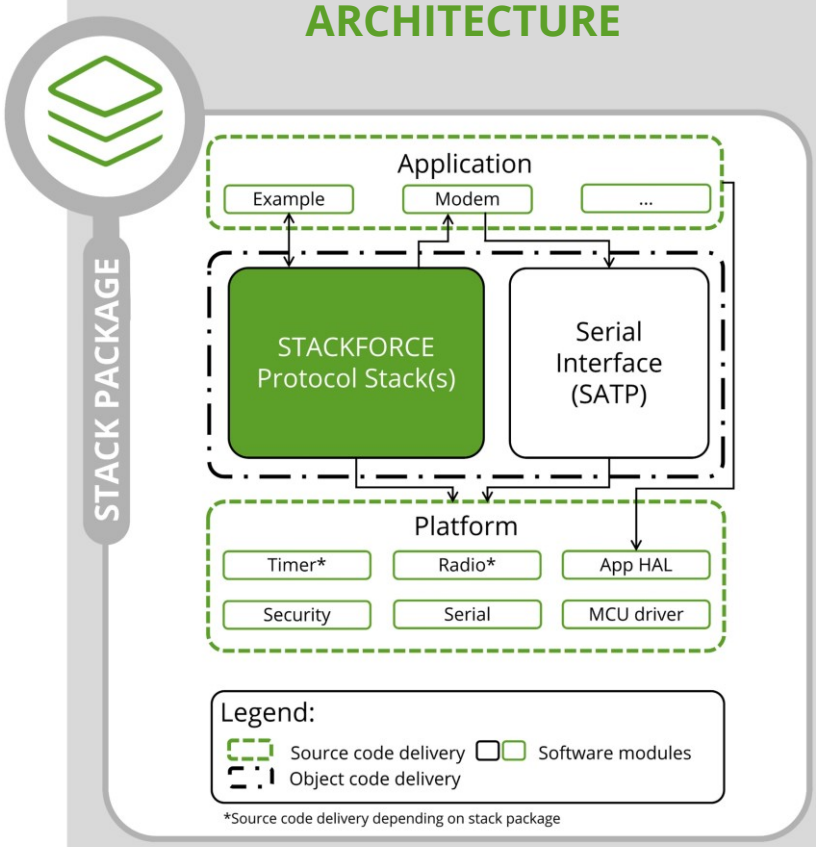
STACK CHARACTERISTICS

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.

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®, LoRaWAN®
- 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