## STACKFORCE <br> embedded.connectivity.solutions

## mioty ${ }^{\circledR}$ Protocol Stack

The STACKFORCE mioty ${ }^{\circledR}$ 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 103357 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 103357 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 <br> [unidir] | CC13x0 <br> [bidir] |
| :---: | :---: | :---: |
| Flash | $\sim 40 \mathrm{kB}$ | $\sim 80 \mathrm{kB}$ |
| RAM | $\sim 13 \mathrm{kB}$ | $\sim 10 \mathrm{kB}$ <br> +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.


## 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 ${ }^{\circledR}$, LoRaWAN ${ }^{\circledR}$

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

