

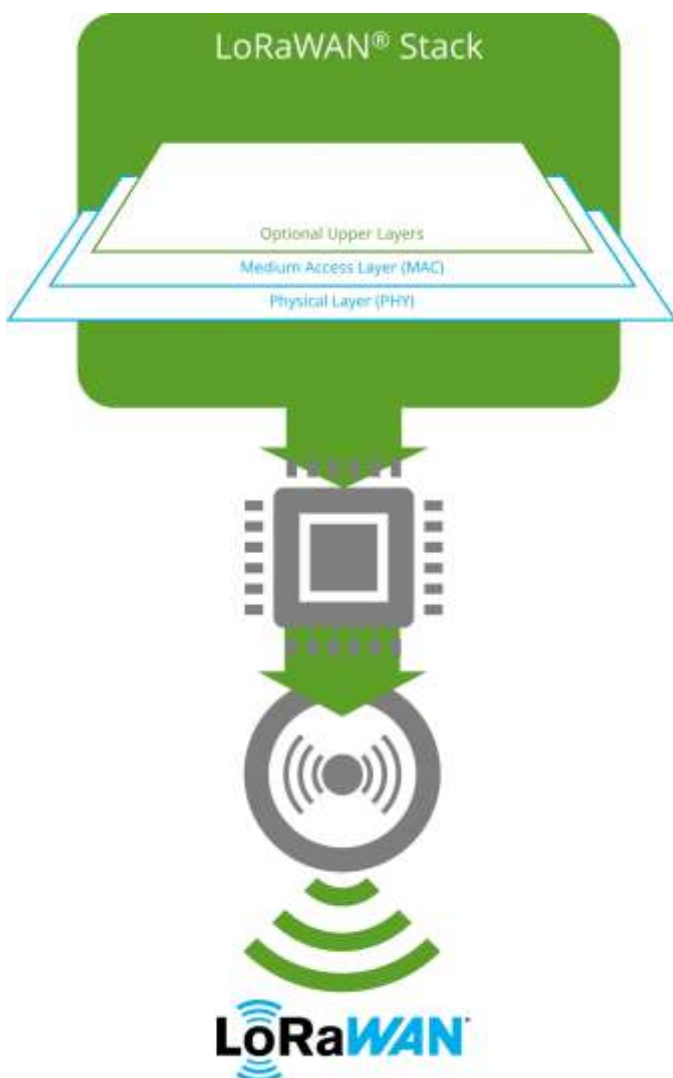
## LoRaWAN® v1.0.4

The LoRaWAN® v1.0.4 Stack from STACKFORCE is designed for powerful industrial use in complex environments with high security requirements and maximum performance.

The STACKFORCE stack was the first licensable LoRaWAN® Stack on the market and is still the only one today. As an integral part of the product portfolio, the stack is continuously adapted to the changing needs in the IoT environment.

For example, the STACKFORCE LoRaWAN® Stack is prepared for multi-protocol operation thanks to a flexible API. By integrating additional technologies, the stack can be used for an even wider range of use cases.

With this stack, you get a product that not only impresses with its technical features, but also with professional support as well as long-term maintenance and availability.



Compliant to LoRaWAN® Specification v1.0.4 and associated Regional Parameters



Designed for high-performance industrial use in complex environments



Industry proven in numerous IoT applications worldwide



Pre-certification on various reference hardware platforms

## SUPPORTED SPECIFICATIONS

Compliant according

- LoRaWAN® v1.0.4
- LoRaWAN® Regional Parameters v1.0.3

## STACK FEATURES

Compliant to LoRaWAN® v1.0.4

- Class A, B & C
- OTAA & ABP
- Pre-certified for several regions
- LoRaWAN® Regional Parameters v1.0.3:
  - EU868
  - US915
  - AU915
  - AS923
- Application Layer Support:
  - LoRaWAN® Application Layer Clock Synchronization v1.0.0
  - LoRaWAN® Remote Multicast Setup Specification v1.0.0
  - LoRaWAN® Fragmented Data Block Transport v1.0.0

## REFERENCE HARDWARE

- STM32WL5/STM32WLE5

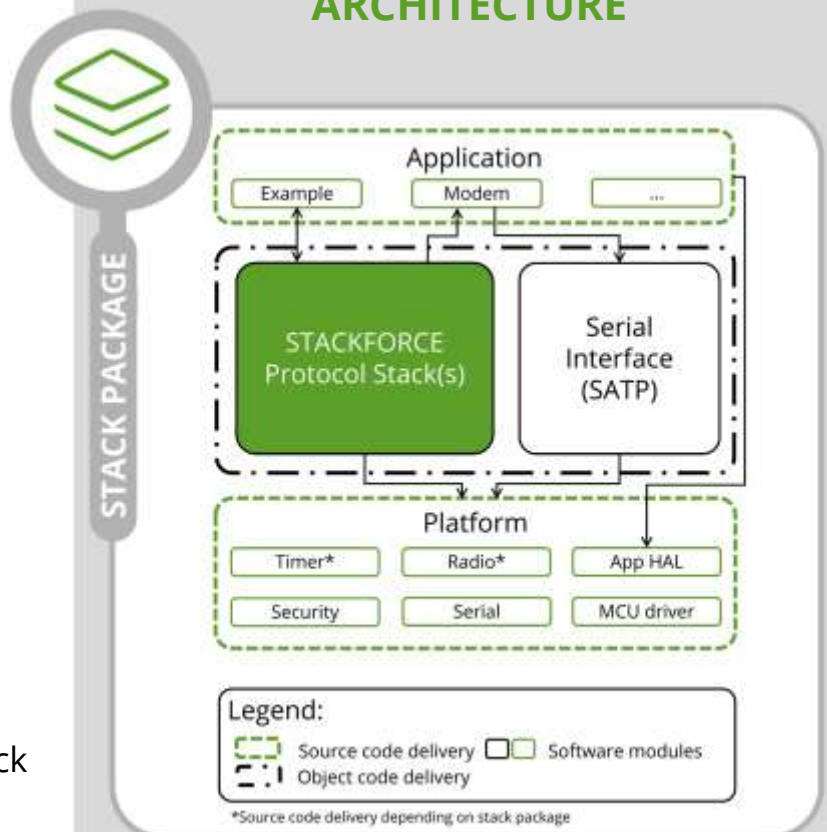
## STACK CHARACTERISTICS

Memory requirements\*

	Library	Applications, HAL, drivers, other software
Flash	~ 31 kB	~ 25 kB
RAM	~ 3 kB	~ 7 kB

\* 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. The RAM requirements for LoRaWAN® FUOTA are not included in the values, as these are very dependent on the application.

## STACK PACKAGE ARCHITECTURE



## YOUR BENEFITS

✓ Long-term availability and maintenance of the stack as well as professional support with quick reaction times

✓ Prepared for multi protocol applications: with flexible and well-proven multi stack API for seamless migration to other protocol stacks, e. g. OMS®, mioty®

Platform Interface now available as source code:

- Customization and fine tuning of platform driver
- Customization of radio settings (e.g., frequency)