

# OMS<sup>®</sup> v4.5.1 / wM-BUS FOR END DEVICES

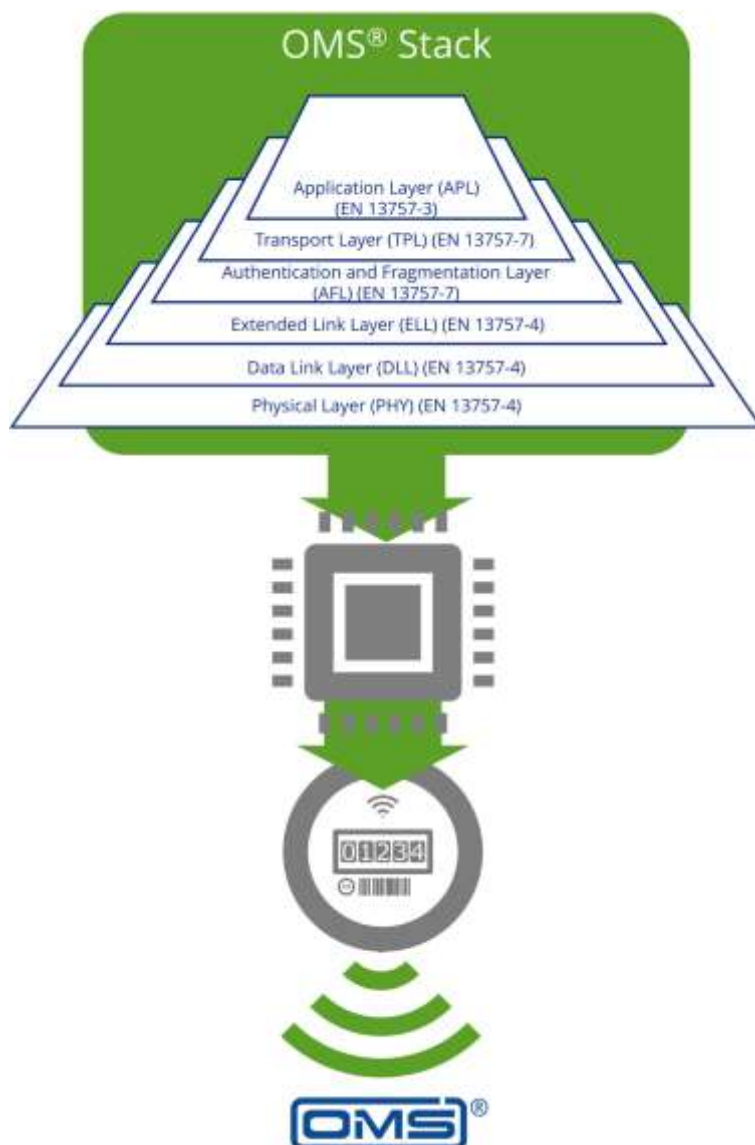
The OMS<sup>®</sup> Stack for End Devices is the proven software solution for metering applications from our product portfolio and comes with some enhanced features in OMS<sup>®</sup> version 4.5.1.

The stack implements all the protocol elements required for Wireless M-Bus compliance and covers a large part of the options and features specified in EN 13757 and its sub-standards, with a

focus on the most commonly used options and features.

This single stack is optimized for a compromise between small footprint, excellent modularity and scalability, but still rich in features.

With the OMS<sup>®</sup> v4.5.1 Stack, you can be sure to equip your products with a proven and constantly evolving software solution.



Compliant to EN 13757 -3/-4/-7 (Wireless) M-Bus and OMS<sup>®</sup> Specification



Low complexity and optimization of energy consumption



Bidirectional as well as unidirectional communication possible



Pre-certification on reference hardware platform

## SUPPORTED SPECIFICATIONS

Compliant according

- EN 13757-3/-4/-7
- OMS® Specification

## STACK FEATURES

OMS® v4.5.1 / Wireless M-Bus

- Operation modes S, T or C
- Security profiles A or B (encryption modes 5 and 7)
- Security profile D (encryption mode 10)<sup>1</sup>
- Annex C „Sensor“ compatibility
- Enables application to support all use cases specified by Annex M „Requirements for OMS® use case support“
- Enables optimization of TRX timing<sup>1</sup>

<sup>1</sup> Feature will be implemented in a later product version.

## REFERENCE HARDWARE

- CC13x0<sup>2</sup>
- EFR32FG23
- EFR32FG28
- NXP MCXN94 + NXP UBX100
- STM32WL3
- STM32WL5/STM32WLE5

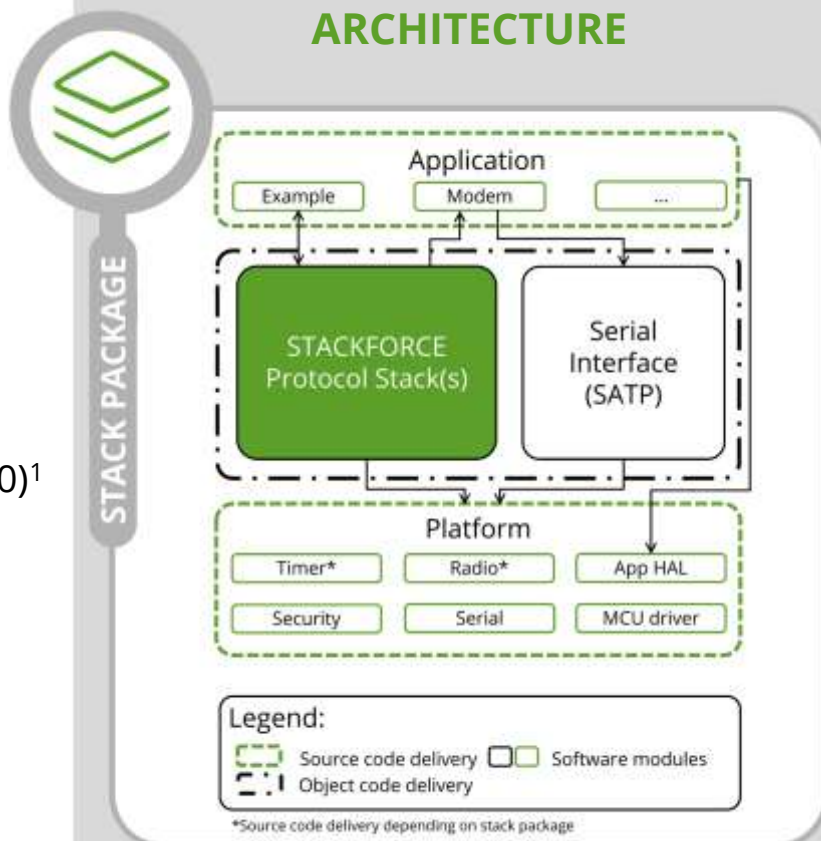
<sup>2</sup> For this hardware the stack implements OMS® version 4.3.3

## MEMORY REQUIREMENTS\*

	Library	Applications, HAL, drivers, other software
Unidirectional		
Flash	~ 22,9 kB	~ 28 kB
RAM	~ 4,1 kB	~ 4,0 kB
Bidirectional		
Flash	~ 35,2 kB	~ 29,4 kB
RAM	~ 4,5 kB	~ 4,1 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 STM32WL5/WLE5.

## STACK PACKAGE ARCHITECTURE



## YOUR BENEFITS



Optimization of energy consumption and usability of utilities (as e.g., CRC or AES) by application



On-the-fly configuration: Quick stack adaption to different use cases



Stack porting to your specific hardware



With a directly available OMS® v4.5.1 Standard Stack you shorten your time-to-market significantly.