

OMS[®] v5.0.1

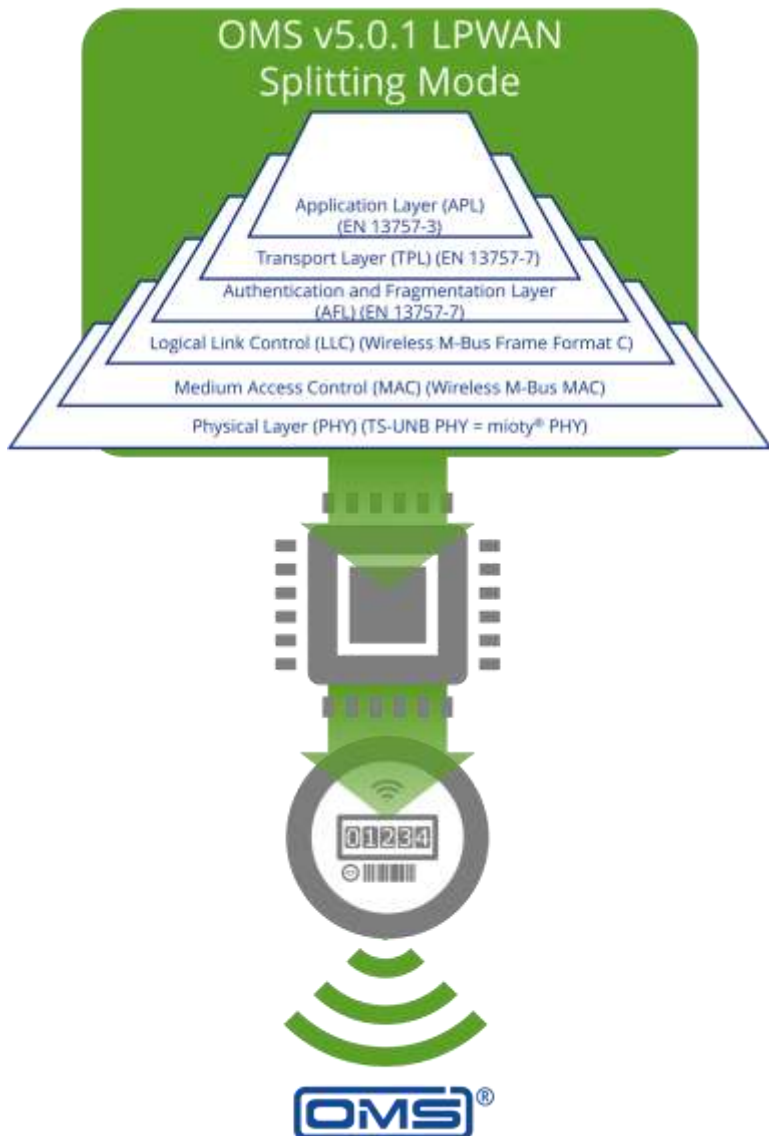
LPWAN SPLITTING MODE (UL-S1)

OMS[®] v5 – the new generation of the OMS[®] stack is making its way into the metering world. With this generation you get a powerful product that merges the OMS[®] specification with the Physical Layer of the mioty[®] LPWAN technology, specified according to TS-UNB – ETSI TS 103357.

Use this stack to introduce your OMS[®] customers to a product that is not only

characterized by excellent robustness thanks to the integration of telegram splitting technology, but also has a significantly greater range than previous OMS[®] versions.

With the new OMS[®] generation, you can offer your customers high-performance products with the option of expanding their fields of application in their existing OMS[®] networks.



Compliant to EN 13757 and OMS[®] Specification, implementing Gen. 5 Annex Q "OMS[®] LPWAN"



Excellent robustness due to the implementation of the telegram splitting technology



Significantly higher range of the new OMS[®] generation compared to the previous version



Pre-certification on reference hardware platform

SUPPORTED SPECIFICATIONS

Compliant according

- EN 13757 and OMS[®] Specification, implementing Gen. 5 Annex Q "OMS[®] LPWAN"
- TS-UNB – ETSI TS 103357

STACK FEATURES

- Unidirectional transmission [UL-S1] in asynchronous mode
- OMS[®] security profiles A & B
- Short and long TPL header (CI-fields 7Ah and 72h)
- Physical parameters [UL-S1], according to Telegram Splitting Ultra Narrow Band (TS-UNB) profile EU0

REFERENCE HARDWARE

STM32L072CZ + SX1276

verified on B-L072Z-LRWAN1

STACK CHARACTERISTICS

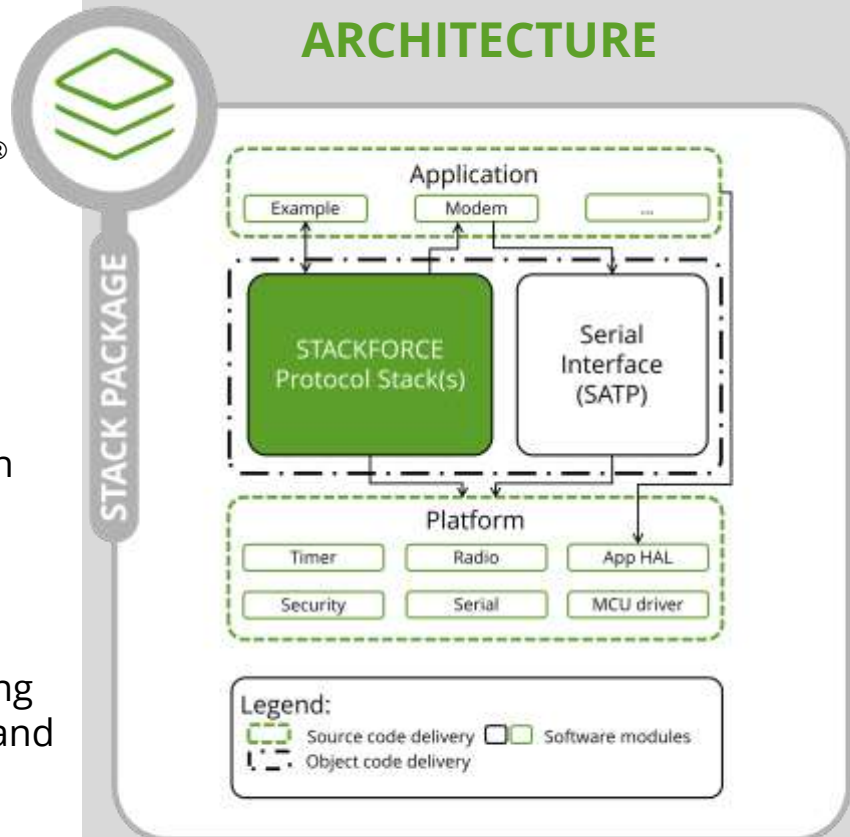
Memory Requirements*

	Library	Applications, HAL, Drivers, other software
Flash	~ 23 kB	~ 33 kB
RAM	~ 2,9 kB	~ 1,3 kB

- Already included **400 bytes RAM** to typical stack library due to dynamic memory allocation (_RAM).

* 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



The OMS[®] v5 stack generation enables a high degree of device interoperability.



Combination of the interoperability of OMS[®] applications and the great robustness and range of mioty[®].



Platform Interface enabling customization and fine tuning of Platform Driver.



With a directly available OMS[®] v5.0.1 Standard Stack you shorten your time-to-market significantly.