

WIRED M-BUS OMS® v4.5.1 FOR SLAVE DEVICES

The Wired M-Bus Protocol Stack for Slave Devices offers a powerful, wired solution for seamless data transmission to M-Bus networks.

Designed for applications such as consumption metering, it ensures reliable and efficient communication, making it an excellent choice for environments that demand consistent and secure data exchange. With a straightforward master-slave communication model, implementation is remarkably simple, allowing for easy integration into existing systems.

Fully compliant with EN 13757-2/-3/-7 standards and supporting the OMS[®] Specification v4.5.1, the Wired M-Bus Protocol Stack meets the latest requirements for Wired M-Bus communication.



SUPPORTED SPECIFICATIONS

Compliant according

- EN 13757-2/-3/-7
- OMS[®] Specification

STACK FEATURES

EN 13757-2/-3/-7 (Wired M-Bus) and OMS[®] Specification 4.5.1 compliant Protocol Stack for Slave devices:

- Interference-free data transmission via cable
- Supported message types TX (Slave - Master):
 - o RSP-UD
 - o ACK
- Supported message types RX (Master - Slave):
 - SND-UD
 - o REQ-UD2
 - o REQ-UD1
 - SND-NKE
- Slave addressing according to EN13757-7 (2018)
- Baud rate change by CI-Fields according to EN13757-3 (2018)

REFERENCE HARDWARE

• STM32L0

STACK CHARACTERISTICS

Memory requirements*

	Library	Slave applications, HAL, other components
Flash	~ 28,4 kB	~ 19,3 kB
RAM	~ 3,2 kB	~ 6,2 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.



YOUR BENEFITS



OMS[®] implementation of the Wired M-Bus stack is a great base for interoperable devices



Support for use in conjunction with common embedded operating systems (OS), such as Free RTOS or OS-less (bare metal)



Stack porting to your specific hardware



Example application allowing an easy start-up of the stack



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STACK PACKAGE ARCHITECTURE