

# Wireless M-Bus USB Adapter

## Key Features

- Wireless M-Bus interface for PCs and mobile terminals via USB
- Range up to 100 m
- Communication via virtual COM port
- Wireless M-Bus according to EN13757-4:2013 standard
- OMS (Open Metering System) standard supported
- wM-Bus modes: S, T, R, and C<sup>1</sup>
- Conforms with EU R&TTE 1999/5/EC directive



## Description

The AMB8465-M is based on the Wireless M-Bus radio module AMB8426-M providing a plug+play PC communications link via USB interface. It allows PCs or service-terminals to communicate with electricity-, gas- or water-meters via the wM-Bus interface. It simplifies the installation, the testing or maintenance of the radio-interface of data concentrators or MUCs. The integrated microprocessor controls the entire data communication as well as block- and checksum-creation. Data packets are built and transmitted according to EN13757-4.

The USB-adapter is versatile configurable and supports all operating modes according to the wireless M-Bus specification. The quality of the radio link can be assessed by using the measured field strength (RSSI value). The graphical user interface of the free windows application „AMBER-ACC“ allows for easy configuration of the operating parameters.

## Interfaces

The device is connected either via a virtual COM port or directly via USB using the corresponding software API. The USB controller (FTDI FT232R) supports USB 2.0 (full speed). The corresponding drivers may be downloaded from the FTDI homepage.

The software-interface is identical to the AMB8426-M and is described in the corresponding manual.

## Scope of Application

The USB adapter is designed for automatic meter reading / smart meter reading applications according to EN13757-4 (wireless M-Bus). It is ideally suitable for the easy integration of PCs, mobile terminals and service terminals into a wireless M-Bus network for test and maintenance work.

## Specifications

Performance	Range*	up to 100 m (S mode)
	RF data rate	2.4 / 16.384 / 66.6 kbps
Radio Technology	Frequency range	863.03 - 868.95 MHz
	Channel spacing	868.03 MHz + $k \cdot 0.06 \text{ MHz}$ $k=[0.9]$ 868.30 MHz 868.95 MHz
	Modulation type	2-FSK, GFSK
	Supported topologies	Point-to-Point, Point-to-Multipoint, Peer-to-Peer

\* Range stated is calculated assuming line-of-sight. Actual range will vary based upon specific board integration, antenna selection, and environment.

## Ordering Information

Item no.	Description
AMB8465-M	Wireless M-Bus USB Adapter with integrated ceramic antenna



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<sup>1</sup> C-Mode implemented since FW-V2.0.