# Wireless M-Bus USB Adapter with SMA connector

### **Key Features**

- Wireless M-Bus interface for PCs and mobile terminals via USB with SMA connector for an external antenna
- Range up to 800 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
- In compliance with EU R&TTE directive



### **Description**

The AMB8665-M is based on the Wireless M-Bus radio module AMB8626-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, the RSSI value. The graphical user interface of the free windows application "AMBER-ACC" allows for easy configuration of the operating parameters.

Combined with a suitable antenna it is possible to reach ranges about 800 m. It is also possible to operate the USB-stick in a shielded environment (e.g. a steel cabinet), by using the AMB1982 antenna, by means of which it is possible to lead the antenna to the outside via cable.

#### **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 AMB8626-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 suited 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 800 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 • 0.06 MHz k=[0.9] 868.30 MHz 868.95 MHz
	Modulation type	2-FSK, GFSK

<sup>\*</sup> Range stated is assuming line-of-sight. Actual range will vary based upon destination device, antenna selection, and environment.

#### **Accessories**



USB Stick with AMB1981 antenna \*

## **Ordering Information**

Item no.	Description	
AMB8665-M	Wireless 868 MHz USB stick/adapter with SMA-connector	
AMB1981	SMA antenna with swivel base	
AMB8665-M-K	Set comprising of AMB8665-M and AMB1981	



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<sup>\*:</sup> The USB stick AMB8665-M also complies with the R&TTE directive when utilizing the antenna AMB1981