

User Manual UNI13-Q60-232 / UNI13-Q60-USB

RFID read/write module 13.56 MHz closed coupling



Contact/Copyright

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FCC Compliance Statement

These devices comply with part 15 of the FCC Rules. Operation is subject to the following two conditions:

- 1. These devices may not cause harmful interferences;
- 2. These devices must accept any interference received, including interference that may cause undesired operation.

The following figures list the Grant by FCC ID Number for each of the following devices:

Please refer to the FCC's website (http://www.fcc.gov/) to view the grant and related documentation.

CAUTION!

Exposure to Radio Frequency Radiation. The radiated output of this device is far below the FCC radio frequency exposure limits. Nevertheless, the device shall be used in such a manner that the potential for human contact during normal operation is minimized. In order to avoid the possibility of exceeding the FCC radio frequency exposure limits, human proximity to the antenna shall not be less than 20cm (8inches) during normal operation. These devices may not be co-located with any other transmitter or transmitter antenna.

NOTE:

This equipment has been tested and found to comply with the limits for a Class A digital device, pursuant to part 15 of the FCC Rules. These limits are designed to provide reasonable protection against harmful interferences when the equipment is operated in a commercial environment. This equipment generates, uses, and can radiate radio frequency energy and, if not installed and used in accordance with the instruction manual, may cause harmful interference to radio communications. Operation of this equipment in a residential area is likely to cause harmful interference in which case the user will be required to correct the interference at his own expense.

Changes or modifications not expressly approved by Microsensys GmbH could void the user's authority to operate the equipment described in the manual.



Introduction



The RFID read/write module UNI13-Q60 is part of the inductive read/write- identification system iID $^{\otimes}$ 3000 and serves for the reading and writing of 13.56MHz RFID transponders. It supports RFID transponder systems like iID $^{\otimes}$, TELID $^{\otimes}$, ISO15693, I-CODE $^{\text{TM}}$, tag-it $^{\text{TM}}$, my-D $^{\text{TM}}$, LEGIC $^{\otimes}$ and further. The UNI16-Q60 is available in two types, with a serial interface and with a USB interface to the host computer.

This product is designed for use in industrial environment together with a host, such as handheld devices or laptops. The small size and the integrated antenna on the front side of the UNI13-Q60 module allow a simple use in many different applications. For the mechanical mounting of the module four threads for screws on the back side may use.

Please read this document carefully to prevent damage and unwanted results.



Technical Data

Housing: plastic case with integrated antenna, epoxy molded

Size: 55mm x 29mm x 12mm (without cable or connector)

Temperatur range: Operating: 0 ... +50 °C

Storage: -25 ... + 70°C

Power supply (VCC): 5V +/- 5%, ripple <50mV

Current consumption: typ. 100mA (active mode, with active RF field)

typ. 10mA (idle mode, without RF field)

Connector: serial interface: USB interface:

BLR 125Z, standard USB Type A

Fischer Elektronik

Voltage Level: serial interface: USB interface:

high: 0.85*VCC ... VCC according USB 1.1 standard

low: GND ... 0.15*VCC

Protocol: baudrate: 57.6 kabaud

data bits: 8 stop bits: 1 parity: no

Software interface: iID® Driver Engine for Windows

Supported Commands: see actual API documentation of iID® Driver Engine



RFID air interface

Carrier frequency: 13.56MHz +/- 7kHz

RF output power: 200mW

Implemented standards: ISO15693, ISO14443B

Anticollision: not implemented

Antenna type: P13

Operating distance: 0 ... 50 mm

depending on transponder type and environment conditions

Ordering information

Product	Product code
UNI13-Q60-232	25.26.603.02
UNI13-Q60-USB	25.29.600.02



Safety instructions

- The device may only be used for the intended purpose designed by for the manufacturer.
- Unauthorized changes and the use of spare parts and additional devices which have not been sold or recommended by the manufacturer may cause fire, electric shocks or injuries. Such unauthorized measures shall exclude any liability by the manufacturer.
- The liability-prescriptions of the manufacturer in the issue valid at the time of purchase are valid for the device. The manufacturer shall not be held legally responsible for inaccuracies, errors, or omissions in the manual or automatically set parameters for a device or for an incorrect application of a device.
- Repairs may only be executed by the manufacturer.
- Installation, operation, and maintenance procedures should only be carried out by qualified personnel.
- Use of the device and its installation must be in accordance with national legal requirements and local electrical codes.
- When working on devices the valid safety regulations must be observed.

Questions? Contact us:

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