RFID Interfaces



QuickStartGuide

iID® stick USB

system: LEGIC®

variant: basic

RFID read write unit 13.56 MHz closed coupling RFID



## contact/copyright

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## introduction



This document briefly describes the basic operation of the <code>iID</code>® stick USB. Please read this document carefully to avoid mistakes or problems with the product.

With the new iID® stick USB microsensys marks a new generation of RFID readers. This device is designed around an RFID interface for the operation of LEGIC® Prime and LEGIC® Advant transponders. The iID® stick USB also allows the use of transponders with standards like ISO15693, ISO14443A und ISO14443B, but without the support of a data encryption.

The USB interface of the iID® stick USB supports the VCP (Virtual Com Port) mode. For communication via USB the corresponding COM-port, set up by a driver, must be selected at the host.



# handling



This small and handy device is for use in applications of access control systems with USB host function. Care was taken to keep the interface of the device to an USB standard to make the operation as simple as possible.

To put the iID® stick USB into operation, it is only connected to the USB port of the PC (host) system. The device is then automatically switched on and ready. After starting the device is fully functional. If a PC (host) is connected to a device, it can receive commands through the USB interface.

The general characteristics of the device are given in the data sheet.



# configuration

#### basics

For the use of a VCP RFID interface it is important that you know something about the externally not recognizable difference to an USB RFID interface, because both devices have a standard USB-type-A access. The VCP interface is an emulated serial port using an USB connection. This function is realized by the driver. The drivers ensure that at your PC a virtual serial port (engl. virtual COM port, VCP) is installed and the device behaves like a serial interface in the RFID software.

### preliminary

Before you begin installing the serial microsensys RFID interface, you should make sure that you will find the device and the software CD in good condition and undamaged. If this is not so, it is advised not to install the device, because for any damages no liability can be accepted.

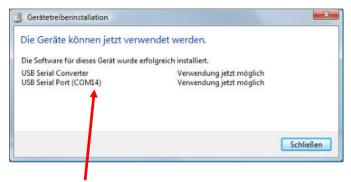
You should check, if the PC has a free appropriate USB-type-A connector and when there is a free appropriate USB-type-A connector the RFID interface can be connected to the PC. If all ports are in use for the commissioning of the RFID interface another device must be removed. Note that maybe you must use the "safely remove hardware"/"Hardware sicher entfernen" button to avoid damages to the appropriate device. Please check the included device documentation.



#### Windows 7 installation

This section describes the configuration of the iID<sup>®</sup> stick USB under Windows 7

Once the iID® stick USB has been connected to the PC system, Windows 7 automatically installs the appropriate drivers. After successful installation the following window appears).



In that window of the device driver installation the associated virtual serial COM-port can be seen (in this figure COM14).

Further information can be found in the Windows Device Manager.



#### Windows XP installation

This section describes the configuration of the iID<sup>®</sup> stick USB under Windows XP.

To begin installing the VCP RFID interface, please turn on your PC, wait until it is fully started and put the supplied CD into the CD-ROM drive of your PC. Then take the USB plug of the RFID interface, check the alignment and plug it into an available USB-type-A port of your PC. This should be possible without great physical effort, otherwise

please check again the correct alignment of the connector. If you have successfully connected the device to the PC, the following message should appear right below on the desktop.





Shortly thereafter the "assistent for searching after new hardware"/"Assistent für das Suchen neuer Hardware" opens. Select "No, not this time"/"Nein, diesmal nicht", as shown in the figure on the left, and confirm this by clicking on "continue"/"Weiter".

In the next step select the second point "install software from a list or specific location"/"Software von einer Liste oder bestimmten Quelle installieren" and insert the software CD as in the dialog box, if you have not already done so. Confirm the process again by clicking on "next"/"Weiter".





In the following dialogue the top item should be selected "search for the best driver"/"Diese Quellen nach dem zutreffendsten Treiber durchsuchen". Then you can either locate the removeable media on your PC or select the installation source itself e.g. your CD/DVD drive. Confirm your selection by clicking on "next"/"Weiter".



After that the driver software is installed.





At the end of the installation process you must stop the "assistent for searching after new hardware"/"Assistent für das Suchen neuer Hardware" by clicking on "finish"/"Fertig stellen".

In this first step the driver for the "USB Serial Converter" has been installed on the PC. Thus programs can now communicate with an appropriate USB device using the RS232 protocol. Thus the device is

addressable via a virtual COM port, another driver must be installed. On your desktop the following message should appear right below.



### Now repeat these steps again!



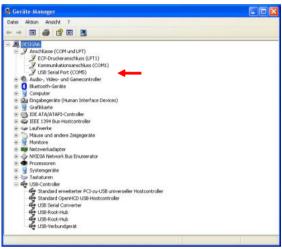
After completing the installation the "assistent for searching after new hardware"/"Assistent für das Suchen neuer Hardware" will be stopped by clicking on "finish"/"Fertig stellen". With a message at the bottom

right on the screen the operating system shows, that the installation was completed and the VCP RFID interface can be used.





So you can work with the VCP RFID interface you should now install the software as in the related documentation, for the case you have not already done so. Now for the interface settings of the software you need the interface number of the just installed virtual serial port. Do this, open your "system control"/ "Systemsteuerung" in the "start menu" and double-click on system. In the dialog that opens select the hardware tab and open the device manager here. The following figure shows, where you can find the just installed RFID interface.



Under "ports (COM & LPT)" you will find the "USB serial port". Behind it in brackets you will see the specific port number. In this case it would be "COM5". This number you must select in the software to communicate with the VCP RFID interface.

### summary - installation check list

- check the status of the RFID interface and of the software CD
   check for available USB-type-A port on your PC
   insert the RFID interface into an available USB port
- Insert the Krib interface into an available USB port
- □ follow the instructions on the screen and the detailed installation instruction to install the drivers
- □ install the software for the commissioning of the RFID interface according to the documentation
- □ identify the interface number of the installed VCP RFID interface the "Device Manager" (the device must be connected to the PC)



## **DEMO-software installation**

The PC installation of the software package is done by starting the program "Setup.exe" in the directory "\Install\WIN32" of the CD-ROM.

Please follow the instructions of the installation routine. Consecutively a menu entry "MICROSENSYS iID® stick DemoSoft" should have been created in the program menu on your computer. Via the menu entry the software can be started now.

Please note that for the use of certain RFID interfaces, e.g. with an USB-interface, the additional and prior installation of the device driver is required (driver installation).



start the software-installation

MICROSENSYS (DIB stick DeviaSobware

MICROSENSYS iID® stick DemoSoftware MICROSENSYS 4D# stox DenoSoftware end installed



software-installation is running



information for the installation

Abbrechen (Zurum Mile

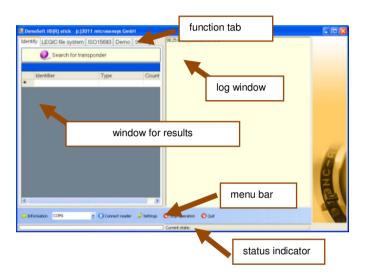


software-installation is finished



## description of the DEMO-software

After installing and starting the DEMO-software of the iID® stick USB the following window appears on the PC screen:



At first the specified COM-based interface must be set up in the menu bar (see driver installation).

Then open the interface with "connect reader".

Once the interface was opened successfully, following line appears in the log window ("reader interface (port COMx) established").

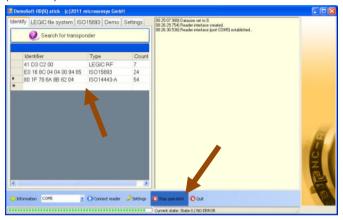
Now you can start with the transponder search in the function tab "identify". You can also see a display in the status bar with the working function.





After a successful transponder search the results (transponder UIDs) and a number of successful readings are shown in the result window. It is possible that there is **more than one** transponder of **a special type** of transponders in the field.

The transponder search can be stopped by using the "stop operation" (menu bar).



By pressing the "read tag structure" function button in the tab "LEGIC file system" the structure (if readable) is retrieved and displayed. It is important to ensure that only the wanted transponder is near the reader.



After successful selection of an identified segment (by clicking the first column in the scale) you can read the data content of the selected segment with the button "read segment". With the buttons "start" and

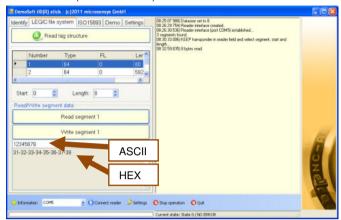


"length" you can set the position and length of the data. You should ensure that the size of the segment is maintained

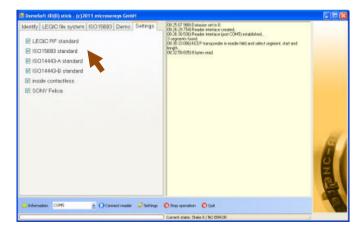
When there is an incorrect configuration of the function an error message appears in the status bar!



When the data of a segment were read successfully they were shown in two formats (ASCII and HEX) below the buttons.



Under the function tab "Settings" you can select those transponder types, the  $iID^{\$}$  stick USB searched for.





## ordering

product identification: iID® stick USB

product code: 37.29.500.00

product description:

37.29.500.00

antenna RFID System functionality

P16 LEGIC®-4200 standard (LEGIC®)

You can order the iID® stick USB as a single stick or in the LEGIC® Starter Kit!

LEGIC® Starter Kit (RFID system: LEGIC®4200, iID®3000, 13.56 MHz) consists of:

1 x RFID reader: iID®stick USB

5 x diverse TAGs (D7-TAG 2k-C, D14-TAG 2k-C, D14-TAGspecial 2k, TIE-TAG

without cable strap, Label 1836special or similar - 2 per TAG-

type)

3 x chip cards: type LEGIC®

1 x CD-ROM (LEGIC®-DEMO-Software)

1 x booklet: QuickStartGuide

### questions? contact us:

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