

RFID
INTERFACES

your partner for integrated innovative RF-IDENTIFICATION system solutions

microSensys

***iID*[®] (mobile) driver engine**
supporting RS232, USB, Compactflash and Bluetooth™ devices
on several Microsoft Windows® platforms

Short installation manual

Introduction

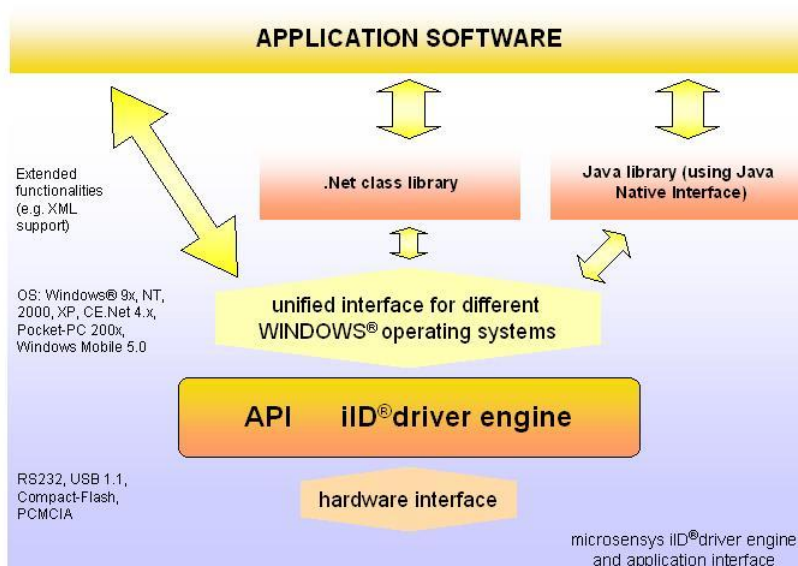
Device driver



MICROSENSYS RFID interfaces for RS232, USB, CompactFlash and Bluetooth SPP port are delivered together with the actual version of IID® 2000/3000 PRO (mobile) driver engine.

This device driver exports a commandset, which is abstracted from the different RFID systems supported by MICROSENSYS RFID interfaces.

So you can easily work with mixed RFID systems, without the need of knowing details about the different systems. Nonetheless, direct access to specific transponder functionality is also supported beneath these intelligent functions.



By delivering an identical API for different host interfaces and host platforms programming is more comfortable than before. Switching between different devices or host platforms is possible without or with a minimum of changes in your application software.

Device drivers are necessary for optimal parameter setting and communication with the according RFID Interfaces.

MICROSENSYS IID® driver engine delivers a unique programming interface for RFID interfaces, which can be connected to standard host interfaces like RS232, USB, CompactFlash or Bluetooth™.

Installation

Driver installation for PC

For communication with your MICROSENSYS RFID interface you should install the hardware driver. During installation of the demo software the driver will be copied into the Windows system directory.

iID® driver engine is tested for the most common Microsoft Windows™ and Windows™ Mobile operating systems.

Installation of device driver (mandatory)

- Go to the folder *,\RFIDDriver\Windows\xxx\x86* or *,\RFIDDriver\Windows\xxx\x64* – depending on your PC OS - on the CD-ROM (where xxx is the type iID2000 or iID3000PRO of your RFID interface)
- Run *,setup.exe'* in this folder
- Follow the instructions of the setup program
- After successful installation the device driver is located in your PC's system folder

Installation of demo software (optional)

- For running the demo software you have to install the MICROSOFT® .Net Framework at first (if not included into your PC operating system), because the application is based on this framework. You can find the redistributable in *,AdditionalMicrosoft .Net Framework redistrib'*.
- Go to folder *,\DemoSoft\Windows\x86'* or *,\DemoSoft\Windows\x64'* of your CD-ROM
- Run *,setup.exe'* in this folder
- Follow the instructions of the setup program
- After successful installation you can run the application from the start menu

Using the driver without demo software

- Change to folder ,\RFIDDriver\Windows\xxx\x86 or ,\RFIDDriver\Windows\xxx\x64' – depending on your PC OS - of the CD-ROM (where xxx is the type iID2000 or iID3000PRO of your RFID interface)
- Copy the files from this folder to ,\windows' or ,\windows\system32' of the PC

MICROSENSYS USB interfaces require the separate installation of the USB device driver. For installing the device driver, see the manual of your RFID USB interface.

MICROSENSYS BT interfaces require a separate pairing procedure, see manual for more informations.

Driver installation for PDA/Terminal

For communication with your MICROSENSYS RFID interface you should install the hardware driver. For mobile devices the installation is splitted to driver installation and installation of the demo software.

iID® PRO driver engine is tested for the operating systems Pocket-PC 200x, Windows® Mobile up to version 6.5 and Windows® CE.Net up to version 6.0.

Installation of device driver (mandatory)

- Depending on the OS type of your device go to the folder '*RFIDDriver\Windows\xxx\yyy*' of the CD-ROM (where xxx is the type iID2000 or iID3000PRO of your RFID interface and YYY is your mobile device type (i.e. Windows Mobile 6.0 (ARMV4)))
- Copy the cab file to your mobile device
- Run the cab file on your mobile device
- Perform the steps on the mobile device, which are displayed
- After successful installation the driver is copied to your device's system directory

Installation of demo software (optional)

- For running the demo software you have to install the MICROSOFT® .Net Compact Framework 2.0 SP1 at first, because the application is based on this framework. You can find the redistributable in '*\Additional\Microsoft .Net Framework redistrib*'.
- Go to folder '*\DemoSoft\Windows\Mobile*' of the CD-ROM
- Copy the cab file to your mobile device
- Run the cab file on your mobile device

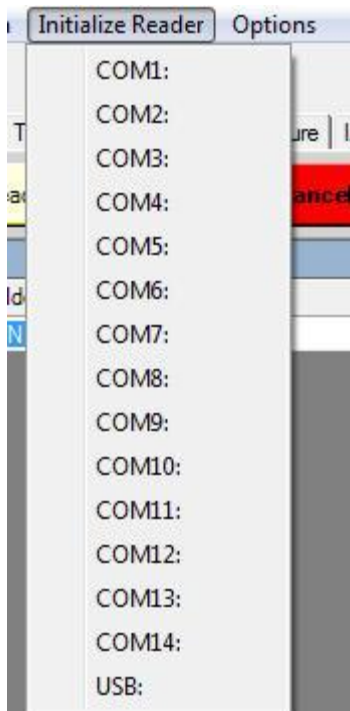
- Perform the steps on the mobile device, which are displayed
- After successful installation you can run the application from the start menu of the mobile device

Manual driver installation

- Change to folder ,\RFIDDriver\Windows\xxx\yyy' of the CD-ROM (where xxx is the type iID2000 or iID3000PRO of your RFID interface and YYY is your mobile device type (i.e. Windows Mobile 6.0 (ARMV4)))
- Copy the files located in this folder to ,\windows' on the mobile device

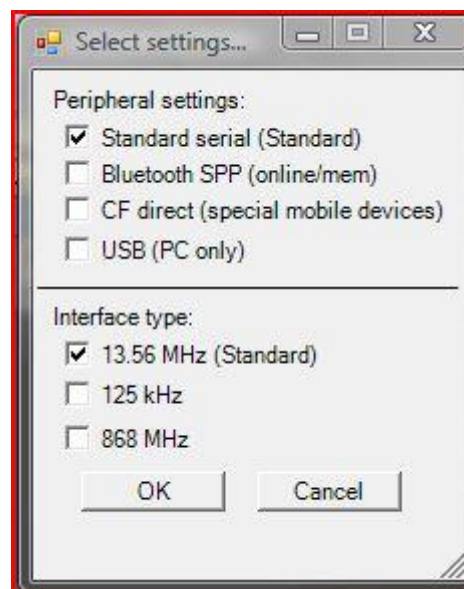
Handling the Demo software

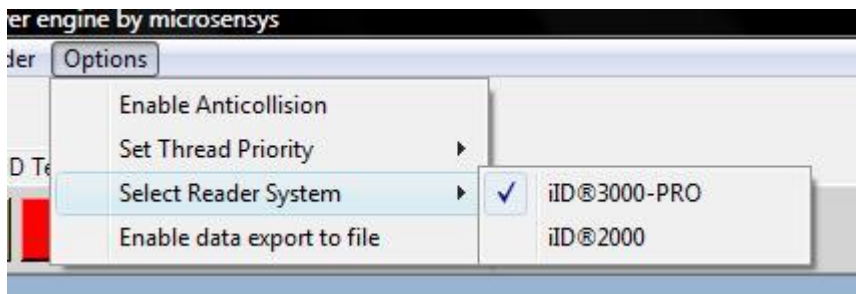
The demo software includes simple commands for representation of the interface and driver functionality to check the proper installation of your MICROSENSYS RFID hardware.



After running the software please select the according reader system (iID2000 or iID3000PRO), port (COMx: / USB) and RFID system (13.56 MHz / 125kHz / UHF) as well as the type of host interface (Serial, Bluetooth™ SPP, USB or CompactFlash **(for MICROSENSYS Compact Flash interfaces we also suggest using the serial emulation mode)**) in the *'Initialize Reader'* menu and the following *'Settings'* menu.

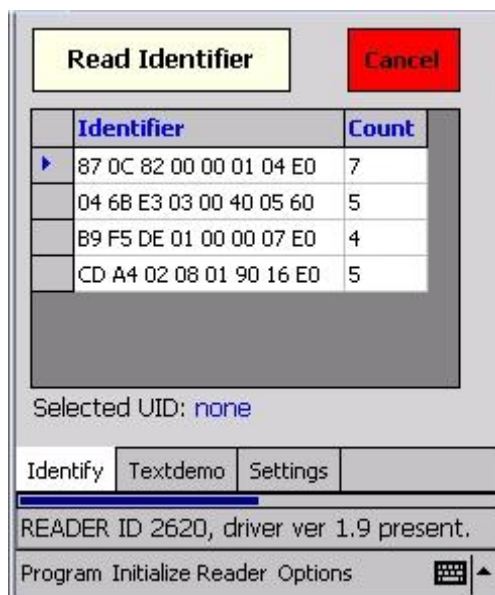
When using a Bluetooth™ or CompactFlash interface, the host system allocates a serial port for the RFID device. In most cases the port number can be detected via the Bluetooth™ Stack or the device manager.





Using the menu “Select reader system” you are

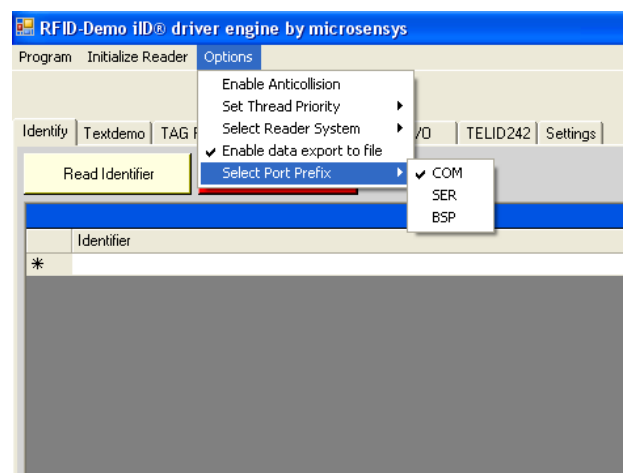
able to switch the software host protocol between “iID@2000” and “iID@3000 PRO”. Please see hardware documentation/delivery papers of your device for more details.



After initializing the reader, the ID-number should be displayed in the status bar. Using the different tab sheets you can now evaluate ReadOnly and Read/Write functionality of the RFID interface.

The options menu allows you to enable the anticollision mode (if supported by the RFID device) and to increase/decrease the priority of the different RFID threads.

If there’s a requirement to change the port prefix of the selectable serial port, please select one of the port prefixes in Options / Select port prefix. Additional port prefixes as well as port numbers can be configured via xml settings file, which is located in the program files folder.



Commandset / memory maps of supported transponders

The commandset of your MICROSENSYS RFID interface is shown in the appendix ‚API Documentation’ located on this CD-ROM.

There is also different sample code available, located in the folder ‘*Developer and samplesVID® driver engine*’ please ask MICROSENSYS at info@microsensys.de for further source code support.

MICROSENSYS RFID interfaces support a lot of available RFID systems of different suppliers, which are available on the market at this time.

For optimal usage of different transponders the knowledge of extended functionality delivered by these systems is very useful.

MICROSENSYS supports system integrators and end customers by delivery of memory maps of different systems and consulting for permutation of different applications.

Please contact MICROSENSYS at info@microsensys.de or by phone at +49 361 59874-0.