**iID®**
**software.**
**tools**

*microSensys*

**RFID in motion**

*Quick Start Guide*

*iID®* software tools

*iID® INTERFACE config tool*
*iID® LAN CONFIGtool*

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# Introduction

iID® INTERFACE config tool is a configuration software solution for customising your MICRO-SENSYS® RFID interface to the needs of your application.

Using the iID® INTERFACE config tool parameters and processes in the RFID interface are set once and permanently stored. Below you will find an overview of possible set-up parameters and functions:

- Parameters for Bluetooth™ communication
- Acoustic settings (buzzer)
- Visual settings (display / LED)
- Power management parameters
- Motion sensor settings
- RF front end settings
- Settings for operating mode / loading scripts
- Reader firmware update

The exact scope of setting options depends on the respective hardware connected.

# Network interface configuration

In order to allow specific parameter settings of iID® contactless RFID interfaces with LAN (network) interface, usage of iID® LAN CONFIGtool is required. The installation of iID® LAN CONFIGtool is done automatically during the setup of iID® INTERFACE config tool.

Setting network parameters is described below in the specific chapter „iID® LAN CONFIGtool".

# System requirements / installation

The software runs on Microsoft Windows XP to Windows 10 32- and 64-bit (in 32 bit mode). In order to execute, it requires the Microsoft .Net Framework Version 4 Client Profile and optional underlying basic driver for the RFID interface (USB driver). Also needed is the iID® CONNECTIONtool for configuration of the reader connection and storage of the configuration file.

In order to execute, the software requires iID® 3000 PRO System RFID interface hardware.
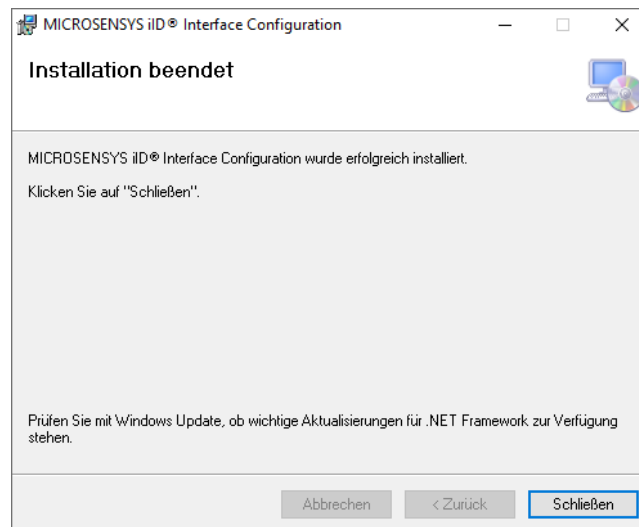
The software is installed using the Windows Installer package.
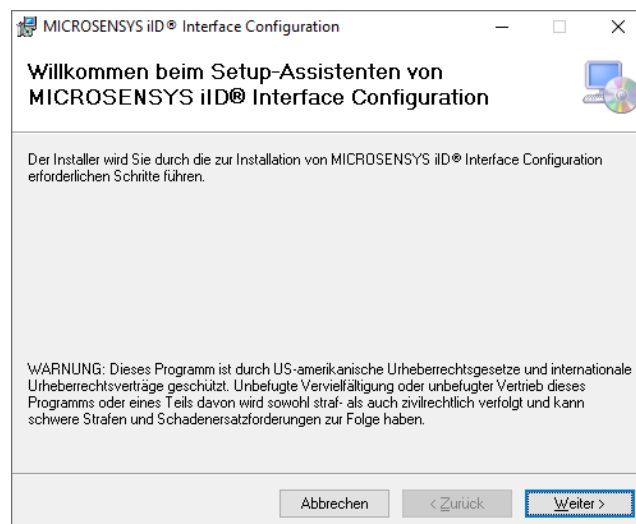


To install, follow the menu prompts in the setup program. You will be prompted to select the program storage location and access settings.
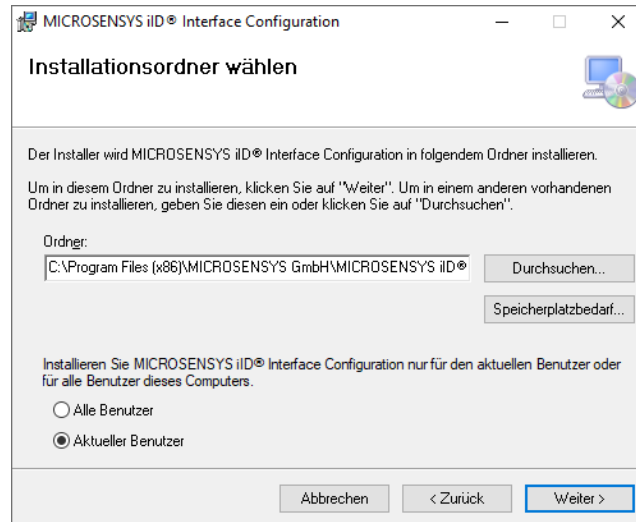
Upon successful completion of the setup procedure a final screen is displayed, from now on the program can be started using "Start Menu / iID® INTERFACE config tool".



*Following installation, please check whether updates to the .Net Framework 4 Client Profile are available. The program can subsequently be started from the Start menu.*

## iID® CONNECTIONtool

Before you start the software for the first time, please ensure that an iID® 3000 PRO compatible RFID interface is connected to your PC and all necessary drivers are installed for this purpose.

Connect the RFID interface automatically with button "Auto Settings" or manual by pressing "Options".



When the configuration is confirmed, the reader ID of the RFID interface should be displayed.
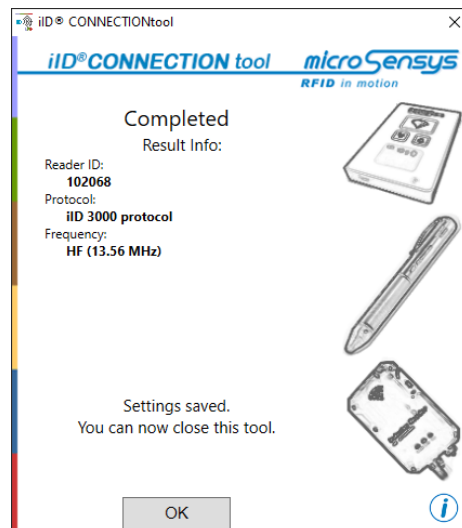
# Operation

Once the RFID interface has been installed and configured, no further hardware settings are required in the software.

Errors in the parameterization of the RFID reader will be displayed with the following error message at the program startup of the iID® INTERFACE config tool. In this case, please proceed as described on page 5 (chapter „iID® CONNECTIONtool") and correct the RFID reader settings!
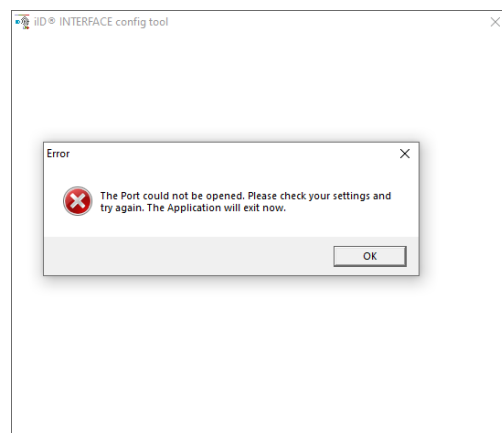


After an error-free startup of the application, the Welcome screen should appear when you first start.



Here you can see a picture of the connected RFID interface and the buttons for selecting the respective functional parameters. When you press one of them, the respective current parameters of the RFID interface are transmitted to the application.

By closing a dialogue with "OK", the new parameters will be stored permanently in the RFID interface. The serial number of the RFID interface and the battery capacity, if it's available, are displayed in the lower area of the Welcome screen.

The various program dialogues are briefly explained throughout this document.

*Please note: the possible settings vary depending on the RFID interface which is connected!*

## Information

Clicking on the ⓘ icon in the lower right area opens the program's information dialogue.
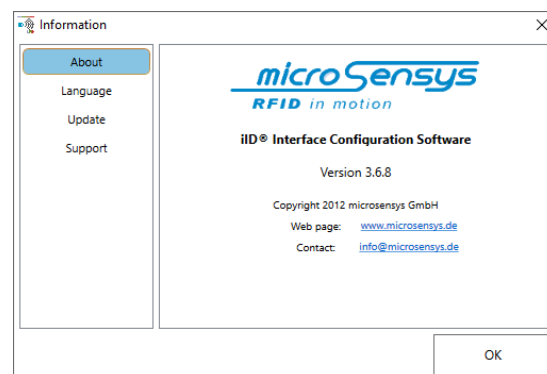


Here you will find information on program version, web URL and a contact email address. It is also possible to change the program language. To change the language setting, the program must be restarted.

The "Update" menu item contains options for updating the iID® INTERFACE config tool and the RFID interface firmware.

Data of your RFID interface can be transferred to microsensys for analysis via "Support".

## General

This dialogue allows you to change the general properties of your RFID interface.
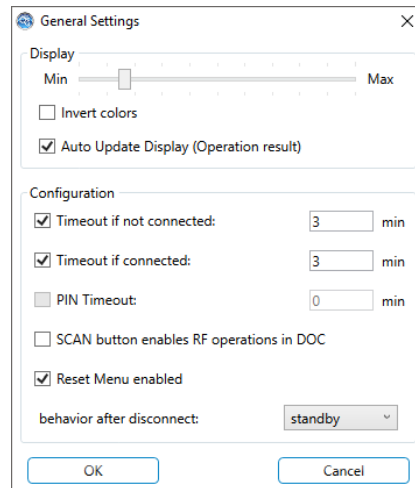


These include display and LED settings and settings for RFID interface power management. For example, this allows you to adjust the LED brightness of the iID® PENmotion. In addition device behaviour after Bluetooth disconnect or in low battery state may be adjusted.

## Bluetooth

In the "Bluetooth" dialogue, the RFID interface can be switched between server, client, and auto client mode, and the MAC address and the service port on the host can be parameterized for client mode. For several devices, this dialog allows Bluetooth PIN setting.
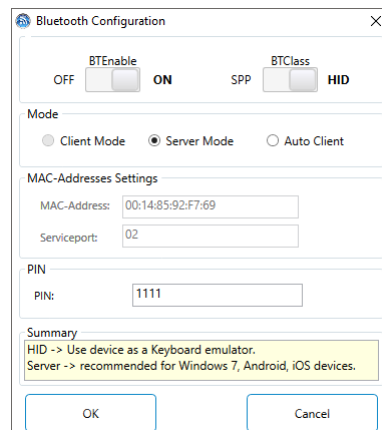
## G-Sensor

If your RFID interface is activated by a motion sensor, the sensitivity of the sensor can be adjusted to different levels in this dialogue.
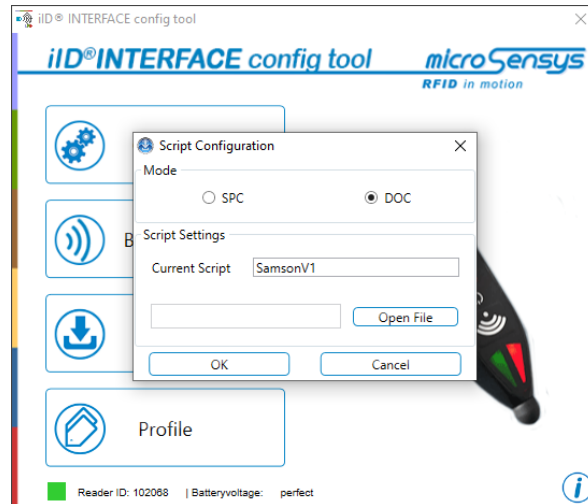
## Script

Some MICRO-SENSYS® RFID interfaces allow the execution of so-called scripts. These handle independent execution of processes by the reader. If your RFID interface supports script mode (SPC), an additional "Script" button appears on the Welcome screen.
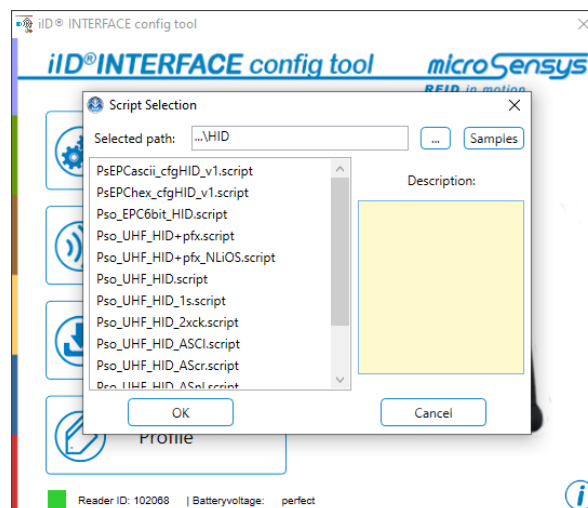


The iID® INTERFACE config tool allows loading of scripts into the reader as well as switching between DOC (Direct Online Communication) and SPC (Script Programming Communication).

To activate script mode, please select "SPC" in the dialogue which is subsequently displayed.

The script currently loaded in the RFID interface is displayed, and you will also have the option to select a new script.



For further information about hardware configuration options and script mode, please refer to your hardware manual or system documentation iID® SPC.

# Updating firmware

Besides the setting of parameters, the iID® INTERFACE config tool is used for updating your RFID interface firmware. If there's an internet connection available during startup of the iID® INTERFACE config tool, software automatically checks for firmware updates of the readers you using.

If any exist, the updates are downloaded to your PC and you receive notification on the Welcome screen from the connected RFID interface that an update is available. In some cases, you may need to install a firmware file, which has to be saved locally. If microsensys provides such a firmware file with the extension ".rff", you should copy it to the path "...\Documents\ MICROSENSYS\iID® Interface Configuration\Update Files". Be sure to delete unnecessary files later, to avoid conflicts with the automatic update process.



*Caution: as with any electronic device, if the update terminates or malfunctions it may cause the device to cease functioning properly. Perform firmware updates only when new functions are absolutely necessary for your RFID interface! Please also note that data collected on your RFID interface, as well as settings, may be overwritten by the update.*

*Before making updates, please ensure that your host and the RFID interface have enough battery voltage available and the data connection to the RFID interface is stable. The update will take a few minutes.*
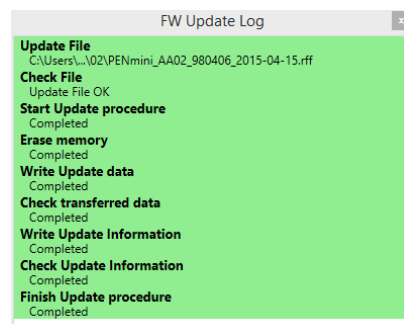
If you wish to start the update process, please click on ⓘ, then on "Update".
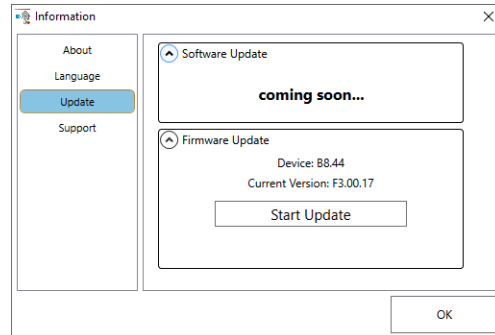


Now select "Start Update" and a status window will open and the update process starts.
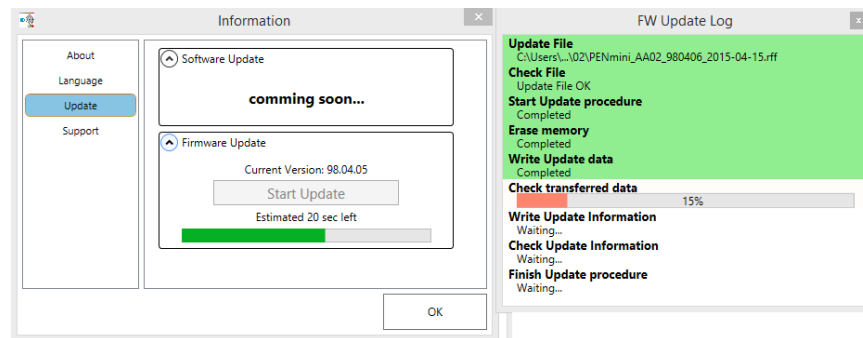


This prepares your device for the update, which will be transferred to the device.



After a successful transfer, the "Update" window can be closed and the status window will also close.

At the end of the firmware update process the application restarts automatically  the RFID interface, which means that the new firmware is immediately active without any further steps.

In individual cases, microsensys will provide firmware updates as a file. In this case, you will receive instructions for installation on your RFID interface. For more information on firmware updates, please refer to your hardware manual.

# iID® LAN CONFIGtool

Network-specific parameters for iID® contactless RFID interfaces are set by using the LAN configuration tool. The LAN configuration tool is installed automatically together with the installation of the iID® INTERFACE config tool.

*Attention: The setting of network-specific parameters should only be carried out by qualified personnel, since the communication with the iID® contactless RFID interface can be impaired by setting incorrect parameters.*

Follow these instructions to set network parameters:

- Connect your LAN-capable iID® contactless RFID interface to network infrastructure and power supply
- start the iID® LAN configuration tool

To connect to the iID® contactless RFID interface, please use the button "search" or the "Manual" tab for IP-based search, see the following illustrations.
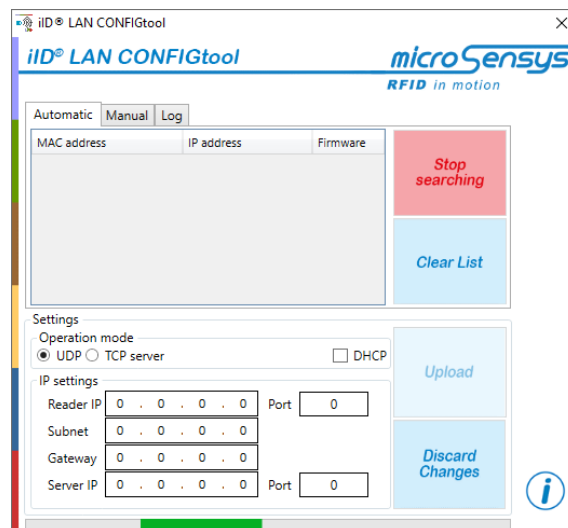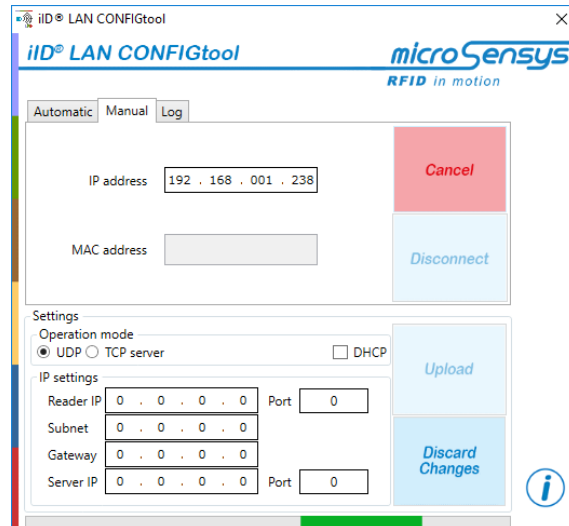
The manual connection to the iID® contactless RFID interface via TCP port 1461 is recommended if the reader is on a remote network or the UDP port 1460 is blocked by firewall or port rules. For manual connection, please enter the known IP address of the iID® contactless RFID interface into the IP address field.

*Attention: Please make sure that the PC and RFID interface are in the same LAN sub-net for the time of configuration.*

If one or more iID® contactless RFID interfaces are listed in the search box, press stop searching.
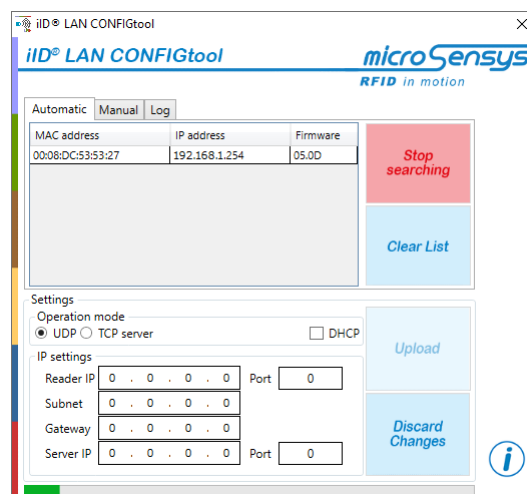
By selecting the desired participant, the LAN parameters of the RFID interface are displayed in the "TCP/IP Settings" area. It is also possible to adapt the desired parameters.
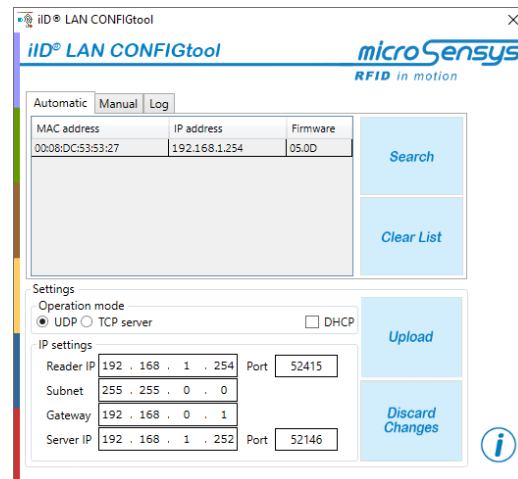


By pressing the button "upload" the updated data is transferred to the RFID interface.

If your network infrastructure has a DHCP-Server you can use the DHCP mode by checking this function. Thereby the interface will get all necessary configuration data.
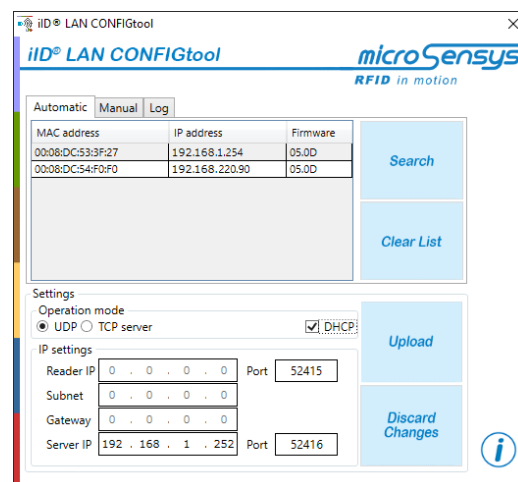


*Attention: Changing the LAN settings of the RFID interface can make a reboot system necessary, e.g. when UDP data packets are to be sent to a new destination address in the script operation mode.*

The following table describes the setting parameters:

| Parameter | Description |
|---|---|
| **Reader IP** | IP address of RFID interface |
| **(Reader) Port** | Port of the RFID interface for incoming data |
| **Subnet** | IP-Subnet of RFID interface and host system |
| **Gateway** | IP-Gateway in the subnet |
| **Server IP** | IP address of host system (e.g. for UDP packets in script mode) |
| **(Server) Port** | Outbound data port of the RFID interface / port of the host system for incoming data |

Do you have any questions?    Contact us:

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