



## RFID Read/Write Device for transponders and sensors

The iID® DESKTOP smart USB 7.0 is a RFID device suitable for read/write of transponder and sensor units working on HF (13.56MHz) frequency. It was designed for office and laboratory applications and is particularly suitable for programming and evaluating TELID® sensor data loggers. The device is to be powered using USB and works together with Windows. Exchanging of command and data with a PC will be also done through the USB connector. Most of all established HF transponders and cards can be read and written.

## Product Short Description & available Versions:

**iID® DESKTOP smart USB 7.0**

Stationary HF RFID USB Read/Write module

CE, FCC, IC certified

System: iID®3000PRO, ISO 15693, ISO14443, all customized

**Product Code:** 35.29.701.00

## 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:

FCC ID: ZLCDESKTOPSHFX

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.

## IC compliance statement

Industry Canada ID: 21228-DESKTOPSHFX

This device complies with Industry Canada RSS-210. Operation is subject to the following two conditions:

- (1) this device may not cause interference, and
- (2) this device must accept any interference, including interference that may cause undesired operation of the device.

Le présent appareil est conforme aux CNR d'Industrie Canada applicables aux appareils radio RSS-210. L'exploitation est autorisée aux deux conditions suivantes:

- (1) l'appareil ne doit pas produire de brouillage, et
- (2) l'utilisateur de l'appareil doit accepter tout brouillage radioélectrique subi, même si le brouillage est susceptible d'en compromettre le fonctionnement.

## Performance description

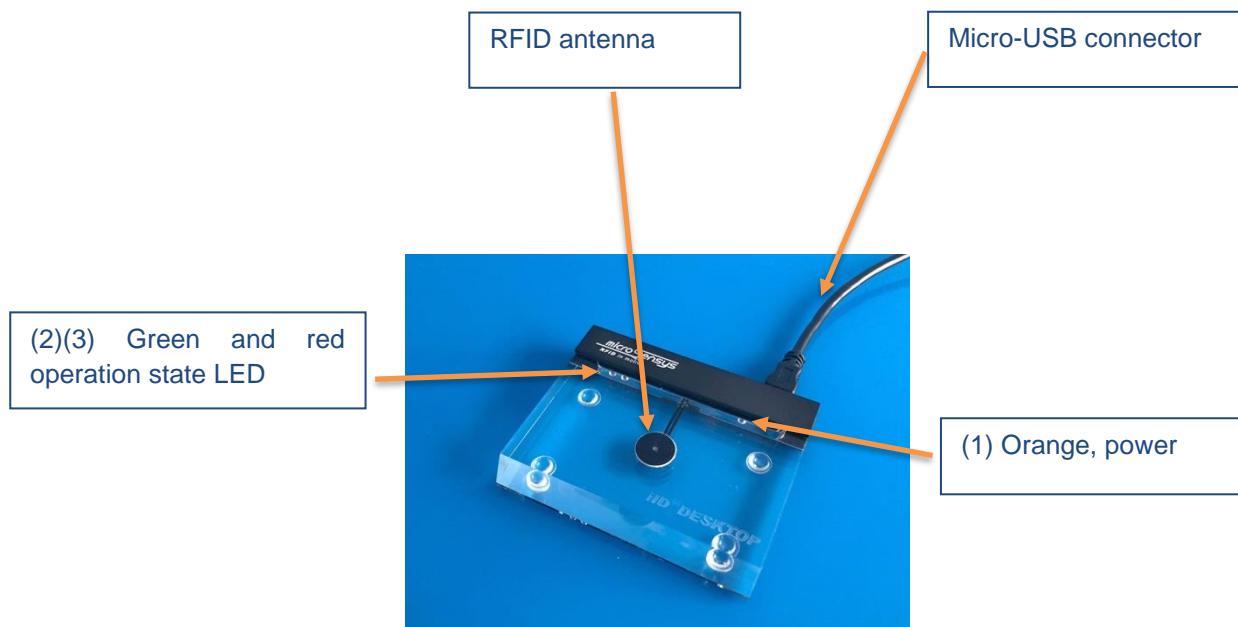
The iID® DESKTOP smart USB 7.0 is suitable for data capture and wireless RFID read / write applications, which can be connected via its integrated USB interface to PCs.

Based on iID® SPC functionality, scripts can be used for definition of LED, as well as communication functionalities as RF, USB.

The iID® DESKTOP smart USB 7.0 is a USB powered device.

The device supports HF systems suitable for closed coupling communication with very small sized up to large RFID transponders. Additionally, all devices support TELID® sensor transponder applications.

## First commissioning



## Manner of functioning

The iID® DESKTOP smart USB 7.0 may be used as RFID read/write device with USB. See following table for available configurations.

Functionality	Operation mode configuration	Interface	Remark
Read/write interface	DOC	USB	Bi-directional USB communication, based on iID® driver engine, device configuration
Read/write interface	SPC	USB	script with output functionality on device

The iID® DESKTOP smart USB 7.0 is delivered in SPC/DOC mode. Please adjust operation mode connecting to a PC via USB interface. Using iID® interface configuration tool you may configure the device according your requirements before first usage. Micro-Sensys provides sample scripts for device usage in SPC mode, which are available for download in iID® interface configuration tool.

## Software to be installed

Please download and install iID® software package including iID® DEMOsoft 2013 or TELID®Soft 5, iID® interface config tool and iID® connection tool as well as iID® driver engine from:

<https://www.microsensys.de/downloads/CDContent/Install/Setup%20iID%c2%ae%20software%20package.exe>

Device configuration is possible using iID® interface configuration tool running on Windows PC environment - via BT connection as well as USB interface. For using USB interface you may also need to install the USB driver, which is available at

<https://www.microsensys.de/downloads/CDContent/USBDriver/Microsensys%20USB%20devices%20driver%20CDM%20v2.12.16%20WHQL%20Certified.zip>

Depending on operation mode (see “manner of functioning”) and platform installation of further software may be required:

Operation mode	Platform	Software
DOC	Windows (without RT) 32/64	iID® software package including iID® driver engine, optional iID® tray application ( <a href="https://www.microsensys.de/downloads/CDContent/Install/iID%c2%ae%20tray%20application.zip">https://www.microsensys.de/downloads/CDContent/Install/iID%c2%ae%20tray%20application.zip</a> )
	Windows Mobile, Windows embedded handheld	iID® driver engine, iID® DEMOsoft ( <a href="https://www.microsensys.de/downloads/CDContent/Install/RFIDDriver/Windows/iID3000PRO/">https://www.microsensys.de/downloads/CDContent/Install/RFIDDriver/Windows/iID3000PRO/</a> , <a href="https://www.microsensys.de/downloads/CDContent/Install/iID%c2%ae%20DEMOSoft/Windows/Mobile/RFID-Demo%20iID%20driver%20engine.CAB">https://www.microsensys.de/downloads/CDContent/Install/iID%c2%ae%20DEMOSoft/Windows/Mobile/RFID-Demo%20iID%20driver%20engine.CAB</a> , optional iID® trigger scan ( <a href="https://www.microsensys.de/downloads/CDContent/Install/iID%c2%ae%20tray%20application/iID%c2%ae%20TriggerScan%20Mobile/iID%20TriggerScan.CAB">https://www.microsensys.de/downloads/CDContent/Install/iID%c2%ae%20tray%20application/iID%c2%ae%20TriggerScan%20Mobile/iID%20TriggerScan.CAB</a> )
	Windows 32/64	TELID®Soft5 ( <a href="https://www.microsensys.de/downloads/CDContent/Install/iID%c2%ae%20DEMOSoft/Android/">https://www.microsensys.de/downloads/CDContent/Install/iID%c2%ae%20DEMOSoft/Android/</a> )

Further Micro-Sensys product related software is located here:

<https://www.microsensys.de/downloads/CDContent/>

## Signs & their meaning

The iID® DESKTOP smart USB 7.0 LEDs are used to show operation state. Additionally, there are device states shown as described below.

Symbol	Description
(1) ORANGE	USB powering
(2) GREEN operation state LED	in DOC mode automatic RF state visualization in SPC mode free programmable
(3) RED operation state LED	in DOC mode automatic RF state visualization in SPC mode free programmable
(2) & (3)	Blinking while POWER_ON

## 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.

## Technical data

Following table contains general technical data.

Parameter	Description
<b>Housing</b>	
Material	Plastic case
Dimension	88mm x 68mm x 11 mm
<b>Power supply</b>	
USB (power supply)	micro USB female, 5V +/- 5%, ripple <50mV
<b>Current consumption</b>	
Idle mode	typ. 34mA
Active mode	typ. 180mA
<b>RFID Interface</b>	
Carrier frequency	13.56MHz +/- 7kHz
Implemented standards	ISO15693, ISO14443
RF output power	200 mW
Antenna	P13v2
Operating distance	0mm...50 mm (depending on transponder type and environmental conditions)
<b>Additional interfaces</b>	
USB interface	USB 2.0

**Equipment delivered:**

1 x iID® DESKTOP smart USB 7.0

**Standard accessories:**

1 x USB cable

**Complementary microsensys Documents**

Technical Datasheet: DESKTOPSmart700-HF xxx.pdf

Product or System Documentation: DOC-iID SPC 01D.pdf

**Contact/Copyright**

Micro-Sensys GmbH • In der Hochstedter Ecke 2 • 99098 Erfurt • Germany

phone: +49 (0) 361 59874-0      fax: +49 (0) 361 59874-17

e-mail: [info@microsensys.de](mailto:info@microsensys.de)      web: [www.microsensys.de](http://www.microsensys.de)

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