

# *iID*<sup>®</sup> contactless

wireless mobile RFID interfaces



**identify • measure • collect • analyze**

# iID<sup>®</sup> contactless mobile devices

for each kind of application

iID<sup>®</sup> wearable



wearable device with Bluetooth<sup>™</sup> LE interface and Qi charge, ON/OFF button, motion and gesture sensors.

iID<sup>®</sup> POCKETwork



Mobile device with Bluetooth<sup>™</sup> and USB interface, OLED display, trigger buttons and clock/memory.

iID<sup>®</sup> PENmotion



EOL

iID<sup>®</sup> PENsolid



Mobile device with Bluetooth<sup>™</sup> and USB interface, LEDs and trigger buttons.

All devices support contactless identification using iID<sup>®</sup> transponders as well as sensing using TELID<sup>®</sup> sensor transponders.

# *Technical overview*



# Technical overview – general parameters

Feature	iID® POCKETwork	iID® PENsolid	iID® wearable
RF	HF, HFcc (stump) UHFcc UHF mid range	UHFcc HFcc (mic3 up to chipcard) UHF mid range (monopol)	UHFcc UHF mid range
Ruggedness	medium (IP54, 1m)	high (IP65)	high (IP65)
Interface	Bluetooth 2.0 SPP/HID, micro USB	Bluetooth 2.0 SPP/HID, micro USB	Bluetooth low energy (BLE) 4.0, Qi charge
Output	OLED display, Buzzer	4 x sign lights (LED), Buzzer	4 x sign lights (LED), vibration
Trigger	Trigger key, up/down keys	Scan button, ON/OFF button	ON/OFF button, motion sensor, gesture
WakeUp	Button, RF WakeUp	Button, RF WakeUp	Button
Operation Modes	DOC, SPC, MPC	DOC, SPC	DOC, SPC
Accessoires	micro USB cable	micro USB cable	Qi charge device
Additional	hand strap	hand strap, touch screen support	watch strap, clothing holder
Price	medium high	medium high	medium high

# Technical overview – electronic & platform

Feature	iID® POCKETwork	iID® PENsolid	iID® wearable
Electronic HF	.700	.700	-
Electronic UHF	T80 v2	T80 v2	T80 v2
Electronic LEGIC™	SM4500	-	-
Windows 32/64 support	● (iID® driver engine or keyboard mode)	● (iID® driver engine or keyboard mode)	-
Windows Phone/RT support	● (HID keyboard mode)	● (HID keyboard mode)	-
Android platform support	● (iID® Android package or keyboard mode)	● (iID® Android package or keyboard mode)	● iID® driver engine Android
iOS support	● (HID keyboard mode)	● (HID keyboard mode)	● iID® driver engine iOS (on request)
space line (firmware update, scripting support)	●	●	●

# TAG compatibility

Feature	iID® POCKETwork HF	iID® POCKETwork LEGIC™	iID® POCKETwork UHFcc	iID® POCKETwork UHF	iID® PENsolid HF	iID® PENsolid UHF
HF - miniaturized transponders	(●) not recommended	(●) not recommended	-	-	●	-
UHF - miniaturized transponders	-	-	●	(●) not recommended	-	●
HF - ISO14443 (NFC, mifare), ISO15693	●	●	-	-	●	-
HF - TELID® iID-L	●	-	-	-	●	-
HF – LEGIC™	-	●	-	-	-	-
UHF transponders	-	-	●	●	-	●

Ordering information	iID® POCKETwork HF	iID® POCKETwork LEGIC™	iID® POCKETwork UHFcc	iID® POCKETwork UHF	iID® PENsolid HF	iID® PENsolid UHF
Product code	72.62.720.00	72.62.525.00	41.12.820.00	41.22.820.00	73.72.750.00	43.72.850.00

# *iID<sup>®</sup> contactless mobile readers*



# Mobile RFID processes with *iID<sup>®</sup>PENsolid*

## Application / features

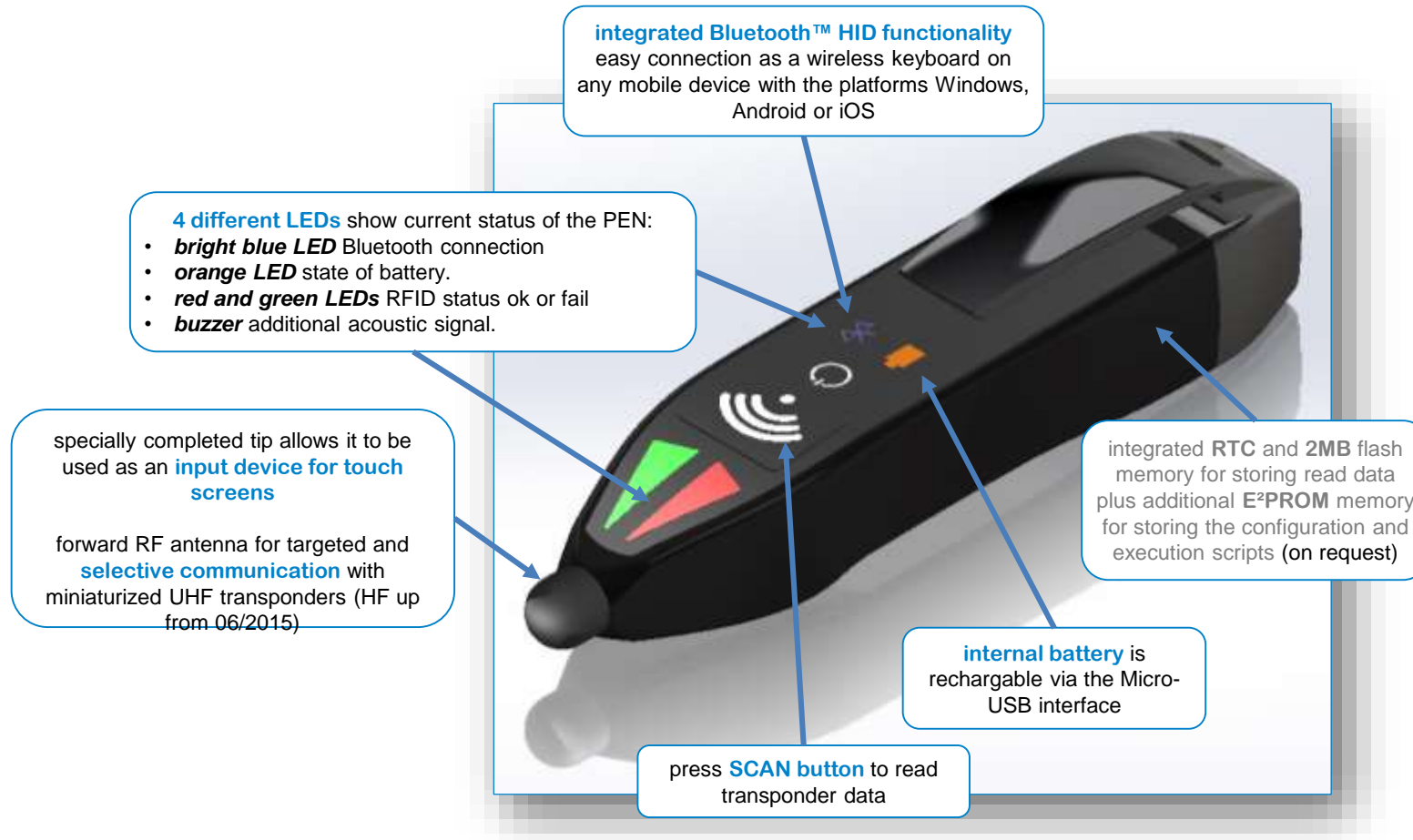
- > RFID read/write unit for mobile Data Capture
- > Touch screen support for capacitive displays
- > DOC or SPC mode supported
- > Compact form factor
- > Bluetooth™ class 2 SPP and HID interface
- > USB micro interface (Data, configuration and charge)
- > two programable buttons
- > LED visualization of
  - *RFID communication*
  - *Bluetooth™ connectivity*
  - *Rechargeable battery state*
- > Integrated buzzer
- > support for Android, iOS\* and Microsoft Windows/Windows Phone

\*using Bluetooth HID keyboard profile





# iID<sup>®</sup> PENsolid – More than just a pen



## iID<sup>®</sup> PENsolid

**RFID Bluetooth reader device**  
available as **UHF\*** and **HF\*\*** version

\*supporting **ISO 18000-6C** and **TELID®** UHF sensor transponders

\*supporting **ISO14443**, **ISO15693** and **TELID®** HF sensor transponders

communicates via a **Bluetooth** to a HOST (Smart Phone, Tablet ...)

**sturdy, lightweight** RFID reader with protection class **IP65** and resistant plastic housing

for usage in **harsh industrial environments** with the latest **mobile devices**

# Data Capture with *iID*<sup>®</sup>POCKETwork v2

## Application / features

- > POCKET reader for mobile Data Capture
- > Stand alone (SPC) or in connection with an HOST (DOC)
- > Casing Size appr. 86 x 54 x 10 mm<sup>3</sup>
- > Bluetooth™ class 2 SPP and HID interface
- > USB micro interface (Data, configuration, time sync and charge)
- > three programable buttons
- > OLED with 96 x 64 Matrix-Display
- > Integrated 2 MB Flash-Memory for storage of collected data
  - *iID*<sup>®</sup> MPC DATAload for PC data transfer
- > Buzzer with adjustable frequencies
- > support for Android, iOS\* and Microsoft Windows/Windows Phone
  
- > Programable Menu for choosing functions like:
  - *display/store Productcode / UID of transponders*
  - *display/store temperature of TELID<sup>®</sup> sensor in °C*
  - *display/store switch open / close using TELID<sup>®</sup> sensor functionality*



# iID<sup>®</sup> POCKETwork – for smart mobile data capture



**iID<sup>®</sup> POCKETwork**  
RFID Bluetooth reader device  
available as **UHFcc\***, **UHF\*** and **HF\*\*** version

\*supporting **ISO 18000-6C** and **TELID<sup>®</sup>** UHF sensor transponders

\*supporting **ISO14443**, **ISO15693** and **TELID<sup>®</sup>** HF sensor transponders

communicates via a **Bluetooth** to a HOST (Smart Phone, Tablet ...) and via **USB** to PC

**sturdy, lightweight** RFID data collector with protection class and resistant plastic housing

for usage in **medium harsh industrial environments** with the latest **mobile devices**

# Smart logistic processes with *iID<sup>®</sup>wearable*

## Application / features

- > UHF RFID read/write unit for smart Data Capture
- > TELID<sup>®</sup> sensor support
- > DOC or SPC mode supported
- > Compact form factor
- > Bluetooth<sup>™</sup> low energy with SPP communication
- > Wireless battery charge (Qi standard)
- > LED visualization of
  - *RFID communication*
  - *Bluetooth<sup>™</sup> connectivity*
  - *Rechargeable battery state*
- > Integrated vibration alarm
- > support for Android, WearOS, iOS and Microsoft Windows/Windows Phone



# iID<sup>®</sup> wearable – scanning while wearing



## iID<sup>®</sup> wearable

**RFID Bluetooth reader device**  
available as **UHF\*** version

\*supporting **ISO 18000-6C** and **TELID®** UHF sensor transponders

communicates via **Bluetooth Low energy** to a HOST (Smart Phone, Tablet ...)

**sturdy, lightweight** RFID reader with protection class **IP65** and resistant plastic housing

for usage in **harsh industrial environments** with the latest **mobile devices**

# iID<sup>®</sup> COLLECTit! mobile

Wireless  
RFID  
interface

Mobile device (smartphone or  
tablet)

internet

Bluetooth™ connected or  
integrated iID<sup>®</sup> contactless  
RFID reader

Local area network (Wifi) or  
WAN (GSM)

iID<sup>®</sup>  
COLLECTit!  
Cloud



TAG or sensor (TELID<sup>®</sup>231  
humiditytransponder)

iID<sup>®</sup> PENSolid, iID<sup>®</sup> contactless  
module

iID<sup>®</sup> driver engine for Windows / Android or HID interface,  
data transport by wide area networks

Data evaluation

# iID® COLLECTit! basic

Wireless  
RFID  
interface

USB or Bluetooth interface to  
personal computer

Local data  
storage

Cloud or  
data evaluation

iID® MPC data storage  
of ID, measurement  
data, time stamp

iID® MPC data collector /  
iID® MPC data converter



Local storage  
XML data files



TAG or sensor (TELID®243 pressure  
transponder)

iID® POCKETwork

iID® MPC software for PC

Data export to CSV or XML

Data evaluation

# Setup

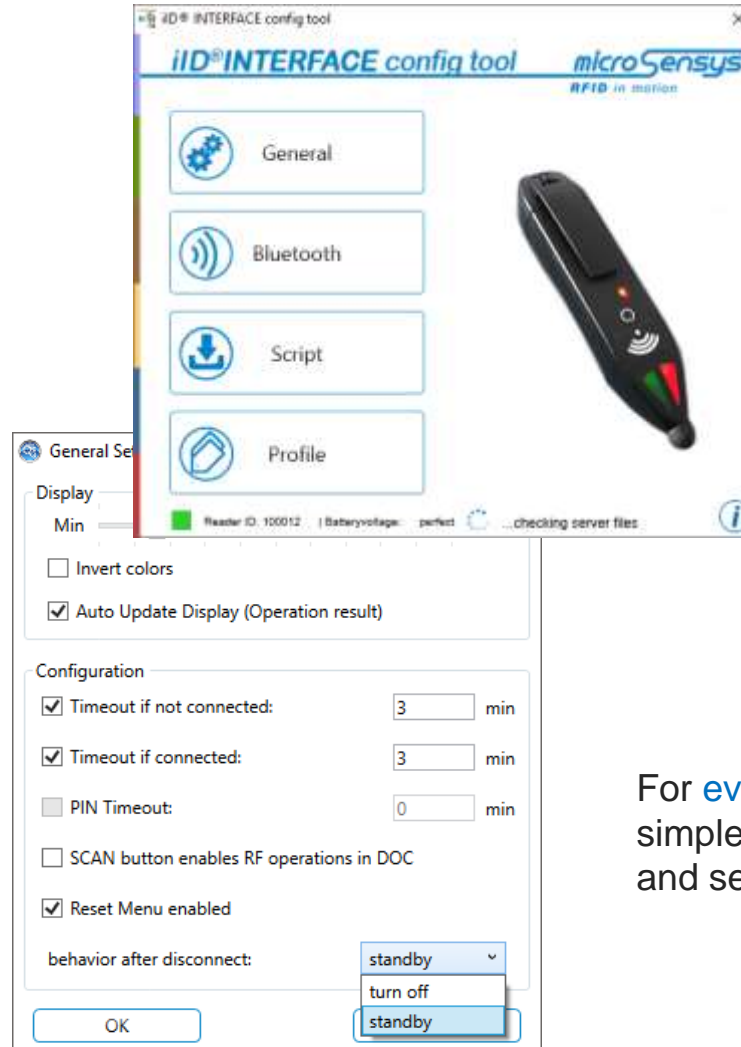




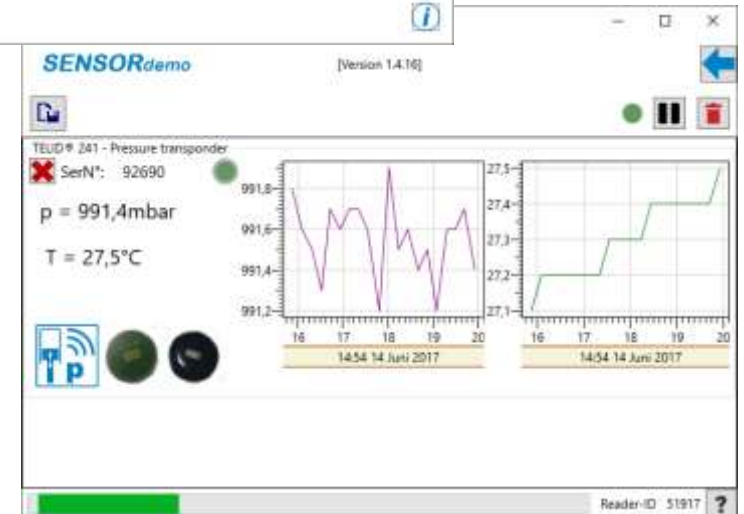
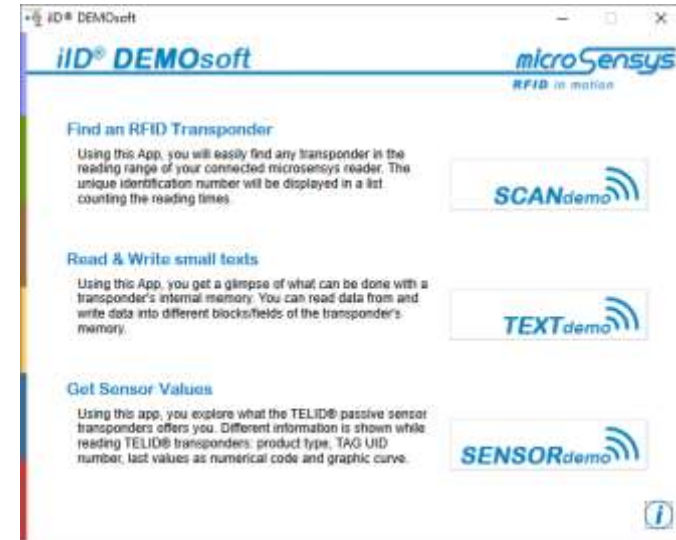
# iID<sup>®</sup> software tools



For initial **setup** and  
reader **configuration**



For **evaluation** and  
simple transponder  
and sensor interaction



# Reader operation modes

Mode	Target	Host communication	Remark
<b>DOC</b> Direct online communication	<ul style="list-style-type: none"><li>• read/write applications</li><li>• full host based reader &amp; transponder control</li></ul>	<ul style="list-style-type: none"><li>• bi-directional protocol based serial host communication</li><li>• iID® driver engine, iID® interface protocol</li></ul>	<ul style="list-style-type: none"><li>• host based transponder search</li><li>• limited reader trigger support</li></ul>
<b>SPC</b> Script programmed communication - SCANNER mode	<ul style="list-style-type: none"><li>• scan applications, reader based transponder control</li></ul>	<ul style="list-style-type: none"><li>• uni-directional serial communication</li><li>• keyboard / HID emulation</li></ul>	<ul style="list-style-type: none"><li>• script based trigger</li><li>• LED and display control</li><li>• mainly used for HID profile based scan applications</li></ul>
<b>MPC</b> Memory packet communication	<ul style="list-style-type: none"><li>• data collector applications</li></ul>	<ul style="list-style-type: none"><li>• iID® MPC library</li><li>• iID® MPC DataLoad for data download</li></ul>	<ul style="list-style-type: none"><li>• script based data collection on device for later PC download</li><li>• available for MPC enabled devices with RTC and non-volatile memory (iID® POCKETwork)</li></ul>

# Operation –

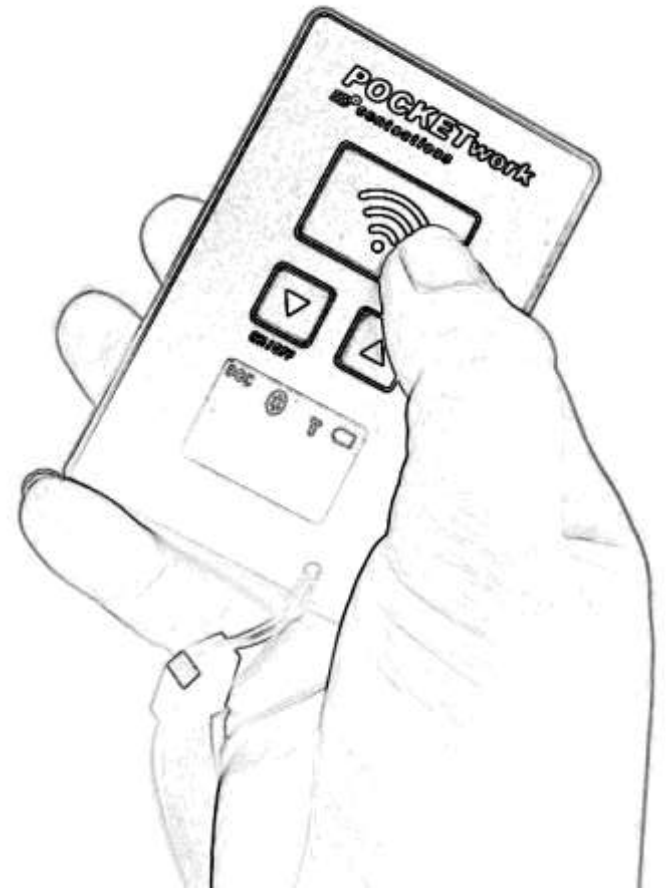
iID® POCKETwork datacollector bundle



# Introduction

## iID® POCKETwork DATAcollector bundle

- is a system solution for mobile RFID based data capture
- may be used for
  - Mobile maintenance processes
  - Faster inventory control
  - Inspection supervision
- can be extended by additional ID & sensor transponders
- comes with MPC DATAload software for data download and export to third party software



# Application



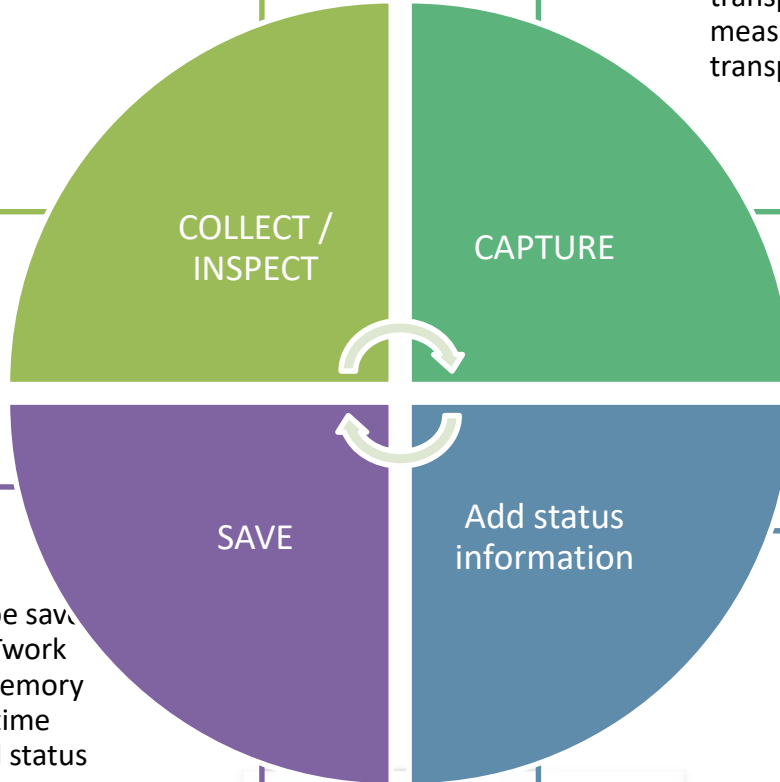
• Visit object to be collected / inspected

• Scan object transponder / measure sensor transponder



**SIGN** Stick transponders / sensor transponders to objects to be collected / inspected

**EVALUATE** Connect device to PC, download data to PC for further evaluation



• Data will be saved to POCKETwork internal memory including time stamp and status information

• Select OKAY, MARK, UNKARK on POCKETwork menu



ID	Time	Status	Date
00000000000000000000	12:00:00	OKAY	12-01-2019
00000000000000000000	12:00:00	MARK	12-01-2019
00000000000000000000	12:00:00	UNKARK	12-01-2019
00000000000000000000	12:00:00	UNKARK	12-01-2019

## iID<sup>®</sup> POCKETwork:

- Connect device to your PC/laptop using USB cable
- install USB driver if requested (provided by Windows update)
- See device quick start guide:

[http://microsensys.de/downloads/Additional%20Content/QuickStartGuides\\_A4/QSG-iID%20POCKETwork%20v2-001E.pdf](http://microsensys.de/downloads/Additional%20Content/QuickStartGuides_A4/QSG-iID%20POCKETwork%20v2-001E.pdf)

## iID<sup>®</sup> transponder sample package:

- Stick transponders to the objects to be collected/inspected
- Note, that transponders of type “special” are to be used in metal environment

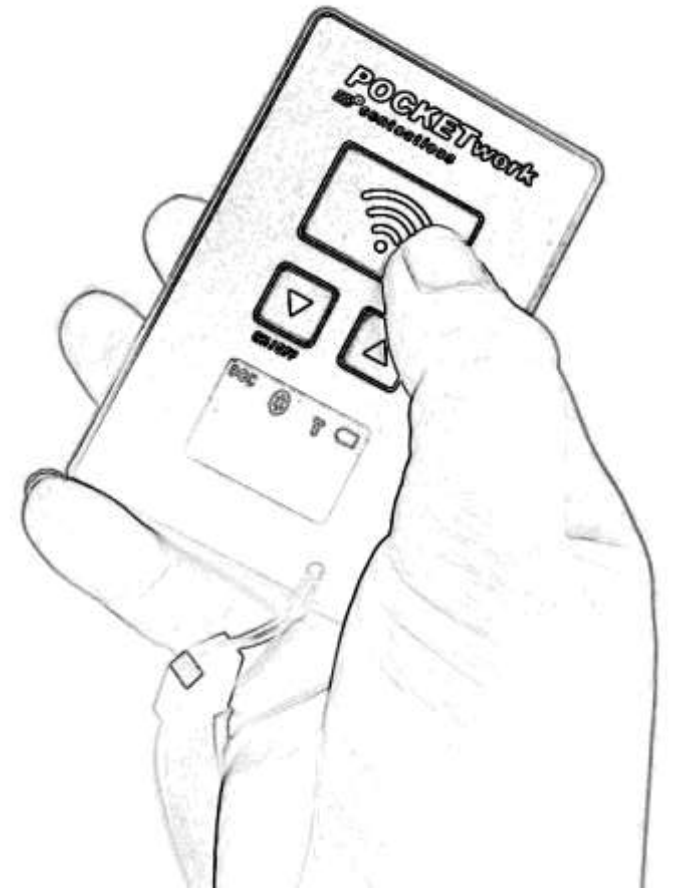
## iID<sup>®</sup> MPC software:

- install iID<sup>®</sup> MPC software:

<http://microsensys.de/downloads/CDCContent/Install/iID%c2%ae%20POCKET/Setup%20iID%c2%ae%20MPC%20Software.msi>

- See quick start guide:

<http://microsensys.de/downloads/CDCContent/Documents/iID%c2%ae%20SPC/Quick-iID%20MPC%2001D.pdf>



# Questions?

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