RFID Data Capturing in Maintenance Processes

development – production – support for transponder - interrogator – software
RFID solutions from a single source

development – production – support for transponder - interrogator – software

Transponder
Sensor Transponder
Sensor Data Logger

Read/Write Units

Software Tools
Installed on a HOST

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Future: RFID Sensor Transponders

RFID Sensor TELID® Transponder
passive
without battery

Passive HF transponder  TELID® 211, 231, 241, 242, 243, 282.î, 282.3D

Passive UHF transponder  TELID® 403, 412, 472
What is the Advantage of Sensor RFID?

different steps in maintenance processes are united

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<tr>
<th>Identification</th>
<th>Registration</th>
<th>Measurement</th>
<th>Evaluation</th>
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<td>Temperature</td>
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all processes in one
Mobile Data Capturing
passive sensors and mobile devices

Sensor TAG | Mobiles Gerät | Host | Datenbank
---|---|---|---

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Data Capture with the iID®POCKETwork

Mobile RFID Reader  iID®POCKETwork

> POCKET reader for mobile Data Capture
> Stand alone (SPC) or in connection with an HOST (DOC)
> Casing Size appr. 86 x 54 x 10 mm³
> Bluetooth™ class 2 SPP* and USB mini Interface
> With three programmable buttons
> OLED with 96 x 64 Matrix-Display
> RTC synchs over the HOST
> Integrated 2 MB Flash-Memory for storage of read Data
> Buzzer with adjustable frequencies
> system support for Microsoft Windows, Windows Phone and Android

> * Bluetooth HID** keyboard emulation plus SPP available in Q2/2014
> ** support for Android, iOS and Microsoft Windows/Windows Phone

> Programable Menu for choosing functions like:
  • display Produktcode / UID
  • display Temperature in °C (with TELID®)
  • display switch open / close (with TELID®)
RFID TAGs on metal – D14-TAGspecial

- D14-TAGspecial
  - special packaging for using on metal, mid size half lens form
  - Technology: 13.56 MHz, ISO15693, 14443
  - Size: D 14 mm, TH 2.5 mm
  - System: iID-2000 / iID-3000
  - available as:
    Read Write Transponder, 2kbit E²PROM, on metal
    Read Write Transponder, 16kbit E²PROM, on metal
    Read Write Transponder, 64kbit E²PROM, on metal, password, encryption
    Read Write Transponder, 256kbit E²PROM, on metal, no ATEX

- for harsh environmental surroundings
- data on the object available
- Applications:
  - Maintenance
  - Inventory Management
  - Electronic Rating Plate
  - …
RFID Transponders – QUIN-TAGspecial

- **QUIN-TAG**
  - special packaging for using on metal, half lens form
  - Customized Printing Service
  - Technology: 13.56 MHz, ISO15693
  - Size: approx. 33 x 30 mm, max. TH 3 mm
  - System: iID-2000
  - available as:
    - Read Write Transponder, 2kbit E²PROM, on metal
    - Read Write Transponder, 16kbit E²PROM, on metal
  - Mounting Instructions: fastening by screw or blind rivet, direct using on metal possible, plane side on metal

- for harsh environmental surroundings
- fastening by screw or blind rivet
- TAG on metal possible
- **Applications:**
  - Maintenance
  - Equipment and Item Tagging
  - …
Contactless Measuring of Pressure
customized for Keller pressure sensor

Advantages of RFID Sensor Data Capture

- Decrease of errors during data capture compared to on paper procedure
- Storing of identification data, calibration values and other information about the measuring point = Life Circle Data available on the Object
- Incidental application costs and time exposure are reduced
- Measurement processes become much easier
RFID Transponders – TIE-TAG

- **TIE-TAG**
  - plastic cable binder, reusable
  - Technology: 13.56 MHz ISO 15693 or 868 MHz ISO18000-6
  - Size: tie type + removable epoxy packaged TAG, Clip 19x19
  - System: iID-2000, iID-4000
  - available as
    - Cable Binder Transponder, UHF, 256bit, EPC compatible
    - Cable Binder Transponder, HF, 2kbit RW, ATEX
    - Cable Binder Transponder, HF, 16kbit RW, ATEX

- for harsh environmental surroundings
- data on the object available
- also as long distance communication
- **Applications:**
  - Maintenance
  - Inventory Management
  - Sensors…