**PRODUCT DATASHEET**

**TEILD® RFID Sensors**

**TEILD® 200.nfc**

**NFC sensor transponder 13.56MHz**

- passive sensor device with user memory
- devices for temperature and humidity measurement
- non flexible hard TAG, Q43S, enabled for usage on metal
- contactless data communication ISO 14443A 2-3, NFC forum type 2 compliant

Passive sensors are very useful in industrial solutions, for quality check in food and pharma industry, for temperature check in maintenance processes and transport and logistics.

RFID Sensor TELID® devices are an integral part of microsensys iID® system solution. Benea compatible with iID®contactless readers, TELID®200.nfc sensor transponders are compatible with NFC supporting mobile devices.

**RF Technology:**
- **RF communication:** RFID system TELID®200
- **Carrier Frequency:** NFC type 2
- **Communication Rate:** 13.56 MHz
- **Communication Distance:** 0 ... 30 mm, depending on reader antenna and environmental conditions

**Sensors:**
- temperature, humidity
- details see table blow

**Memory:**
- **Content:** EEPROM
- **Data Retention / Endurance:** OTP data, ID, parameters
- **Free User Memory:** 20 years / 100.000 cycles
- **Free User Memory:** up to 8kB

**Environment:**
- **Working Temperature:** -25°C ... +85°C
- **Storage Temperature:** -25°C ... +85°C
- **-40°C ... +125°C, maximum range**

**Housing:**
- **Dimensions:** 43 x 27 mm², thickness max. 4.0mm
- **Protection Class:** IP67
- **Packaging:** Q43S, material PA66 GF36 red, epoxy black
- **Marking:** laser printed product type on top
- **Mounting instruction:** glue, power strip or plastic screws, on nonmetal or metal objects

**Operating Modes:**
- **Measure Modes:** PASSIVE SENSOR
- **Basic Functions:** read UID, reading of sensor parameters, reading/writing of object data memory
- **Parameters:** calibration data (optional)

**Battery:**
- no battery

**Operation:**
- **Appropriate RFID Reader:** supported by HF RFID or NFC capable devices
- **Evaluation Software:** DESKTOPsmart, M30-HEAD reader, POCKETwork, Smart Phones
- **iID®DEMOsoft (SENSORdemo), iID®DATACollector optional**
- **Platform:** Windows™ (7, 8, 10), Android™ (7, 8 and 9)

### Types:

<table>
<thead>
<tr>
<th>Working range</th>
<th>Resolution</th>
<th>Accuracy</th>
<th>Product code</th>
</tr>
</thead>
<tbody>
<tr>
<td>-40°C ... +125°C</td>
<td>0.07°K</td>
<td>± 0.5°K (0°C ... +65°C)</td>
<td>13.212.714.10</td>
</tr>
<tr>
<td></td>
<td>0.7%RH</td>
<td>± 1.0°K (-40°C... +125°C)</td>
<td>13.232.714.10</td>
</tr>
<tr>
<td>0%RH ... 100%RH (0°C ... +80°C)</td>
<td>0.2°K</td>
<td>± 5.0%RH (25%RH... 85%RH)</td>
<td></td>
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<tr>
<td></td>
<td></td>
<td>± 7.0%RH (0%RH... 100%RH)</td>
<td></td>
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<tr>
<td>-40°C ... +120°C</td>
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<td>± 0.5°K (0°C ... +60°C)</td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td>± 1.0°K (-30°C ... +90°C)</td>
<td></td>
</tr>
</tbody>
</table>

*) in development or on request

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