**PRODUCT DATASHEET**

**TEILD® RFID Sensors**

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### TELID®300.nfc

**NFC sensor data logger 13.56MHz**

- semi passive sensor data logger
- measurement of ambient temperature, humidity, pressure, shock event
- non flexible hard TAG, package Q54S
- mountable on nonmetal objects
- NFC data communication

RFID Sensor TELID® devices are an integral part of microsensys iID® system solution. These devices are very useful for wireless sensor applications. Caused by their NFC interface they are suitable for supply chain tracking and mobile delivery processes.

**Communication System:**

- **RF communication:** NFC type 2
- **Carrier Frequency:** 13.56 MHz
- **Communication Rate:** 106 kbps
- **Communication Distance:** 0 ... 20 mm, depending on reader antenna and environmental conditions

**Sensors:**

- temperature, humidity, pressure, acceleration (only shock event logging, no waveform recording)

**Features:**

- see following table

**Memory:**

- **Content:** OTP data, ID, parameters
- **Data Retention / Endurance:** 10 years / 100,000 cycles
- **Logging Memory:** up to 4kByte

**Environment:**

- **Working Temperature:** -25°C ... +80°C
- **Storage Temperature:** -40°C ... +85°C, recommended 25°C

**Housing:**

- **Dimensions:** 54 x 40 mm², thickness max. 4.5mm
- **Protection Class:** IP67
- **Packaging:** Q54S, material PA66 GF36 blue, epoxy black
- **Marking:** laser printed product type on top
- **Mounting instruction:** glue, power strip or plastic screws, on nonmetal objects

**Operating Modes:**

- **Basic Functions:** read UID, programming of sampling rate, limit information, start delay
- **Sample Time:** 1 sec ... 65535 sec (=18h 12min 15sec) programmable
- **Battery:** Li MnO2, 68 mAh, primary battery
- **Life Time:** up to 2 years, depending on usage

**Evaluation Software:**

- TELID®soft NFC, TELID®soft
- **Platform:** Android 7, 8 and 9

**Types:**

<table>
<thead>
<tr>
<th>Types</th>
<th>Logging size</th>
<th>temperature</th>
<th>temperature and humidity</th>
<th>temperature-humidity-pressure-shock</th>
</tr>
</thead>
<tbody>
<tr>
<td>Working range</td>
<td>-40°C ... +85°C</td>
<td>0%RH ... 100%RH</td>
<td>-40°C ... +85°C</td>
<td>0%RH ... 100%RH</td>
</tr>
<tr>
<td>Resolution</td>
<td>0.1°K</td>
<td>0.1%RH</td>
<td>0.1°K, 0.1%RH, 1.3Pa, 50mg</td>
<td></td>
</tr>
<tr>
<td>Accuracy</td>
<td>± 0.3°K (0°C ... +40°C)</td>
<td>± 0.5%RH (0°C ... +85°C)</td>
<td>± 2%RH (20%RH... 80%RH)</td>
<td>± 0.5°K (25°C), ± 1.0°K (5°C... +65°C)</td>
</tr>
<tr>
<td>Max. Samples</td>
<td>2224</td>
<td>1112</td>
<td>741</td>
<td></td>
</tr>
<tr>
<td>Product code</td>
<td>14.312.714.00</td>
<td>14.332.714.00</td>
<td>14.392.714.01*</td>
<td></td>
</tr>
</tbody>
</table>

*) in development

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