**PRODUCT DATASHEET**

**TELID® RFID Sensors**

**TELID® 322.3d**

**RFID acceleration event logger**
- semi-passive RFID sensor logger device, high memory
- battery powered, long life time
- contactless data communication ISO 14443, 13.56MHz
- acceleration measurement range 3D, 0…+/-8g, 200Hz
- non flexible hard TAG, package Q54S

RFID Sensor TELID® devices are an integral part of microsensys iID® system solution. These devices are very useful for wireless sensor applications in industry, especially for quality check in automotive industry, for vibration measurements in maintenance processes and in transport and logistics. TELIDs are operating optimal with microsensys standard RFID reader.

**RFID Technology:** RFID system TELID®300, based on ISO 14443B (18000-3) closed coupling HF sensor solution

**Chip Type:** ID-L

**Carrier Frequency:** 13.56 MHz

**Communication Rate:** 106 kbps

**Communication Distance:** 0 … 2 cm depending on reader antenna and environmental conditions

**Data Memory:** EEPROM
- read write type
- endurance >100,000 cycles, data retention > 10 years

**Recording Capacity:**
- SIMPLE MODE: approx.. 1 Mbit
- ADVANCED MODE: max. 123 events, including wave recording

**Acceleration Sensor:** MEMS sensor, 3D (x, y, z-axis)
- programmable range: ±2 g, ±4 g or ±8 g
- programmable bandwidth
- theoretical

**Limit Range:**
- ±4 g or ±8 g

**Frequency Range:**
- 0 … 100 Hz

**Sample Rate:**
- 12.5 Hz, 25 Hz, 50 Hz, 100 Hz, 200 Hz

**Sensitivity:**
- 0.5 mg/√Hz

**Event Recording:**
- date and time of events
- LIMIT, FREE FALL or INACTIVITY detection
- only ADVANCED MODE

**Repetition Time:** approx. 10ms, 1s, 10s or 60s (1 s preferred setting)

**Samples per wave:** 170 samples per waveform and axis

**Clock:**
- quartz RTC
- time synchronization while device programming, resolution 1 s

**Operating Mode:**
- ACTIVE or SLEEP
- optional: password protected ACTIVE mode

**Measure Modes:**
- STOP FULL
- mode

**Recording Mode:**
- SIMPLE or ADVANCED

**Basic Functions:**
- programming of sensor parameters, read parameters, read data memory,
- get current acceleration, read UID
- start time, sample rate, measurement range, bandwidth, shock limit

**Parameters:**
- depending on using conditions

**Primary Battery:**
- LiMnO₂, 68 mAh
- up to 2 years

**Working Temperature:**
- -25°C ... +80°C

**Storage Temperature:**
- -30°C ... +85°C

**Dimensions:**
- 54 x 40 mm², thickness max. 4.5 mm

**Packaging:**
- Q54S case PA66 GF6 blue, encapsulation epoxy black

**Marking:**
- laser printed product type on top, optional unique ID-No

**Mounting Instruction:**
- glue, power strip or plastic screws, for data communication don’t use on metal

**Appropriate RFID Reader:**
- iID PEN or POCKET reader with RS232TTL or USB or Bluetooth,
- iID DESKTOP reader with RS232TTL or USB
- M30-HEAD reader with RS232TTL, RS485 or USB for industrial application

**Software:**
- TELID programming and reading software for Windows PC

Type: 14.322.709.10* 14.322.709.00 *) in development

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<thead>
<tr>
<th>Event Types</th>
<th>14.322.709.10*</th>
<th>14.322.709.00</th>
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<tbody>
<tr>
<td>only LIMIT</td>
<td>all</td>
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