**TELID® 521.3d**

**RFID temperature and sensitive shock logger**
- semi-passive UHF RFID sensor device, event logger
- contactless interface compatible ISO 18000-6C
- temperature range -25°C ... +85°C
- sensitive shock events down to 30 mg (300 mm/s²)

RFID Sensor TELID® devices are an integral part of microsensys iID® system solution. They are very useful for wireless sensors applications in industry, transport and logistics. TELIDs are operating optimal with microsensys standard RFID reader.

**RFID Technology:**
- RFID system TELID®400/500, based on ISO 18000-6C
- Chip Type: IID®-4000
- Carrier Frequency: 868 MHz
- Communication Rate: up link max. 128 kbps, down link max. 640 kbps
- Communication Distance: 0 ... 200 cm depending on reader antenna and environmental conditions

**Data Memory:**
- EEPROM read write type endurance >100,000 cycles, data retention >10 years
- Static Memory: EPC up to 160 bit, TID 96 bit, manufacturer OTP possible
- Data Memory: approx. 1 Mbit
- Recording Capacity:
  - SIMPLE MODE: approx.. 6000 events
  - ADVANCED MODE: max. 123 events, including wave recording

**Temperature Sensor:**
- semiconductor sensor
- Working Temperature: -25°C ... +85°C
- Sample Rate: not programmable
- Accuracy:
  - +/- 0.5 K at 0°C ... +65°C
  - +/- 1.0 K at -25°C ... +85°C

**Acceleration Sensor:**
- MEMS sensor, 3D (x, y, z-axis)
- Range: 0 ... ±8 g
- Limit Range: ±2 g, ±4 g or ±8 g
- Frequency Range: 0 ... 200 Hz
- Sample Rate: 12.5 Hz, 25 Hz, 50 Hz, 100 Hz, 200 Hz, 400 Hz
- Sensitivity: 0.5 mg/√Hz

**Event Recording:**
- date and time of events
- Event Types: LIMIT, FREE FALL or INACTIVITY detection
- Repetition Time: approx. 10ms, 1s, 10s or 60s (1 s preferred setting)
- Samples per wave: 170 samples per waveform and axis
- only ADVANCED MODE
- Clock: quartz RTC time synchronization while device programming, 1s resolution

**Logger Operating Mode:**
- SLEEP, ACTIVE
- STOP FULL (event counter)
- programming of sensor parameters, read parameters, read memory, read status information, start/stop logging, read EPC and TID
- useable memory size, start time, sample rate, measurement range, bandwidth, shock limit, absolute calibration data (optional)

**Battery:**
- Li-Thionylchlorid, 400 mAh
- Life Time: up to 3 years depending on using conditions
- Working Temperature: -25°C ... +85°C
- Storage Temperature: -35°C ... +95°C recommended 25°C

**Dimensions:**
- approx. D30 mm, thickness 18 mm
- Protection Class: IP 67
- Packaging: PEEK ring, epoxy filling (black)
- Marking: laser printed product type on top
- Mounting Instruction: see application note

**Appropriate RFID Reader:**
- INDUSTRY0906 UHF reader
- CASIO IT-800 or IT-G500
- with RS232/TTL, Ethernet or USB interface
- TELIDSoft (PC and Mobile) with UHF reader module on inquiry and depending on application

**Software:**
- with RFID Reader module
- on request

**Type:**
- 14.521.400* 14.521.402* 14.521.401* *) in development or on request

**Data Memory:**
- 256 kbit

**Wave Recording:**
- no

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