## PRODUCT DATASHEET

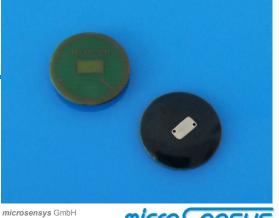
TELID® RFID Sensors

## TELID® 241

## RFID pressure transponder 13.56MHz

- passive pressure measurement transponder
- sensor window on top side
- non flexible hard TAG, package D14
- contactless data communication ISO 14443

RFID Sensor TELID® devices are an integral part of microsensys ilD® system solution. These devices are very useful for wireless sensors applications in industrial solutions, for quality check in food and pharma industry, for temperature check in maintenance processes and transport and logistics. TELIDs are operating optimal with microsensys standard RFID reader.



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this data sheet is subject to change contact microsensys for latest information

TELID241-002

iID®3000 based on ISO 14443B RFID system TELID<sup>®</sup>200 RFID Technology: Chip Type: iID-L closed coupling HF sensor solution

**Carrier Frequency:** 13.56 MHz Communication Rate: 106 kbps

**Communication Distance:** 0 ... 20 mm depending on reader antenna and environmental conditions

**EEPROM** read write type endurance >100000 cycles, data retention > 10 years **Data Memory:** 

Static Memory: parameters, calibration data, manufacturer OTP

Free Memory: see version

**Pressure Sensor:** piezo-resistive MEMS technology sensor with integrated 24bit  $\Delta\Sigma$  ADC

Working Range: 10 mbar ... 1200 mbar

Resolution: 24 hit theoretical 0.024 mbar at 25°C, 700 mbar ... 1100 mbar Accuracy: +/- 1.5 mbar

+/- 2.5 mbar at -20°C ... +85°C, 300 mbar ... 1100 mbar

Response Time: 8 ms **Temperature Sensor:** silicon sensor

-40°C ... +85°C Working Range: Resolution: 0.01 °K Accuracy: +/- 0.8 °K

at 25°C +/- 2.0 °K -20°C ... +85°C Response Time: 8 ms thermal time constant approx.. 10 s

**Operating Mode:** PASSIVE SENSOR **Measure Modes:** ON LINE MEASUREMENT

**Basic Functions:** programming of sensor parameters and data memory commands Parameters:

calibration data (optional)

bit

**Battery:** no battery Working Temperature: -35°C ... +85°C

-40°C ... +125°C Storage Temperature: maximum range

**Dimensions:** D 14mm, max. TH 2.5mm (half lens housing)

epoxy glass fiber enforced (black) Packaging:

thermal contact on back side, pressure sensor on top

Marking: no marking

**Mounting / Using Instruction:** no using on metal, barometric sensor

Appropriate RFID Reader: M30-HEAD reader with RS232TTL or USB

PFN reader with RS232TTL, USB or Bluetooth

**POCKETwork** with Bluetooth UNI13 module OEM product

Software: iID driver engine. iID DEMOsoft.

TELID application software for Windows PC and mobile devices on inquiry

Type: 12.241.100 12.241.200\* \*) in development

Package: half lens lens **Memory Capacity:** 128 128