PRODUCT DATASHEET

TELID® RFID Sensors



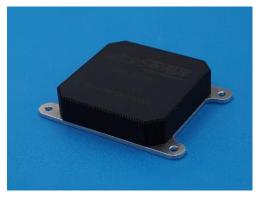
TELID® 780.i

BLE Inclination Sensor and Identification Beacon

- unique identification number
- 2D inclination measurement based on earth acceleration e.g. for process or infrastructure monitoring
- Bluetooth Low Energy data communication
- lifetime up to 5 years due to built-in high performance Li battery

TELID® 700 extends the proven range of passive sensors and sensor data loggers with wireless RFID interface by a Bluetooth Low Energy communication interface.

TELID[®] 700 devices are useful for long range identification or sensing demands. The product can be attached to metal or non-metal surfaces and is even useable under water.



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This data sheet is subject to change. Please contact microsensys for latest technical information. Picture may differ from original product.

TELID780.I-005.DOCX

Contactless Interface:

RF Communication: Carrier Frequency:

Communication Distance:

BLE TELID® 7 long range identification and sensor system TELID® 700

Bluetooth Low Energy 5.2

2.4 GHz ISM band (2.402 – 2.480 GHz)

0 ... 10 m, depending on gateway type and environmental conditions

Sensors:

Working Range:

Noise: Offset drift. Accuracy:

Resolution:

MEMS sensor

2D acceleration (x, y-axis)

-17.5 ° ... +17.5 °

15µg/√Hz ±8mg ±0.02°

0.001 °

Data Memory:

Standard Content:

Remarks:

Security features:

EEPROM

non-volatile memory, write endurance >10⁶ cycles

unique TELID identification number, parameter and calibration data

programmable by TELID®700 configuration tool*

AES-128 encryption*

Mechanical / Environmental:

Housing: Dimensions: Material:

Protection Class:

Mounting:

Working Temperature:

Storage Temperature:

Q7070PM

Q7070PM, sealed

70mm x 70mm, thickness 16mm

PA6

IP65 see application note

-25 °C ... +60°C

-40 °C ... +85 °C, recommended 25 °C

Operation:

Basic functions:

Sampling rate:

Broadcast period:

SLEEP, MEASURE and ADVERTISING

PROGRAM, BROADCAST, CONNECT*

15 sec ... 900 sec, programmed on delivery

> 1 sec, depending on connection period

Energy Source:

Battery:

Lifetime:

Li primary cell

CR2450, replaceable by service up to 5 years, depending on usage

Operation:

Transmission Protocol:

Basic Functions:

Broadcast Interval: Broadcast Duration:

Measurement Interval:

Recommended Gateway:

Configuration Software:

Operating Software:

Device Interface:

SLEEP, MEASURE and ADVERTISING

TELID® 7 beacon protocol

 ${\sf MEASURE, BROADCAST, SLEEP, PROGRAM^*, CONNECT^*}$

15 sec ... 900 sec, programmed on delivery

> 1 sec, depending on connection period

15sec ... 900sec, programmed on delivery

smart phone, iID® INDUSTRY 0906 BLE or iID® gateway Ezurio MG-100 TELID® 7 configuration tool (Android)*

TELID® 700 DEMOsoft (Android)

TELID® 7 beacon protocol, driverless

*) in development or on request



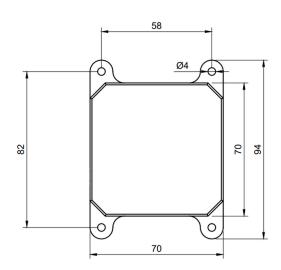
TELID® 780.i

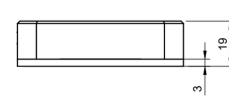
TELID[®] 780.i is a battery powered inclination sensor beacon for unique object identification, inclination measurement, supporting operation with smartphones and other iID[®] contactless components such as gateways.

| Product Code: | 14.780.951.00* | 14.780.951.01 | Unit |
|-------------------|----------------|---------------|--------|
| Measurement Range | +6060 | -17.5 +17.5 | ٥ |
| Noise | 15 | | µg/√Hz |
| Accuracy | ±0.02 | | ٥ |
| Resolution | 0.05 | 0,001 | ۰ |
| Battery Capacity | 550 | | mAh |



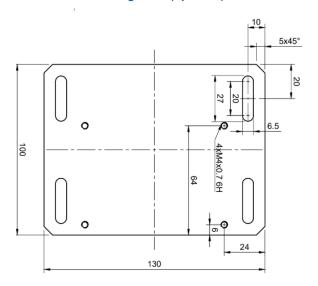
Dimensions:





Q7070PM housing, All dimensions in mm

Dimensions Mounting Plate (optional):





Mounting Plate for Q7070PM housing, all dimensions in mm

^{*)} not for new projects