

# PRODUCT DATASHEET

TELID® RFID Sensors

## TELID® 710

### Temperature sensor and identification beacon

- unique identification number
- integrated temperature sensor
- mountable on nonmetal and metal objects
- integrated push button
- Bluetooth Low Energy data communication

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

TELID® 700 devices are useful for long range identification or sensing demands. Microsensys provides support for stationary and mobile applications.



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

TELID710-002.docx

#### Contactless interface:

RF communication:

Carrier frequency:

Communication distance:

long range identification and sensor system TELID® 700

Bluetooth Low Energy 4.2

2,4GHz

0 ... 30 m, depending on gateway type and environmental conditions

#### Environmental parameters:

Working temperature:

Storage temperature:

-20°C ... +60°C

-40°C ... +85°C (w/o battery), recommended 25°C

#### Sensor parameters:

Sensors:

integrated semiconductor sensor

temperature

(see type information)

#### Memory parameters:

Content:

Remark:

EEPROM non volatile memory, read write endurance >10<sup>6</sup> cycles, data retention > 40 years

unique TELID identification number, parameter data

programmable by TELID® 700 configuration tool

#### Security features\*:

Write protection:

Data encoding:

Originality:

partial read-only protection

128-bit hash encoding

ECC-based programmable originality signature

#### Operation:

Basic functions:

Sampling rate:

Broadcast period:

SLEEP, RUN, MEASURE

PROGRAM, BROADCAST, CONNECT\*

15sec ... 900sec, programmable

> 0.5sec, depending on connection period

#### Housing:

Material:

Protection class:

Marking:

Mounting instruction:

plastic housing, openable, for dimension see type information

Poly Carbonate

IP68

custom print (on request, MOQ 500 pcs)

on nonmetal and metal objects, self-adhesive or screwed, see type information

#### Energy:

Consumption:

Battery:

Lifetime:

Sleep: 4 µA, RUN 2mA, TRANSMIT 4mA

CR2032, replaceable by service

typ. 2 years, depending on usage

#### Operation:

Appropriate gateway:

Configuration software:

Operating software:

requires smartphone or BLE gateway

iID® controller CCO, BLE4.2 enabled smartphone

TELID® 700 configuration tool (Android)

TELID® 700 DEMOsoft (Android)

iID® DATAcapture software (running on iID® controller)\*

#### Device interface:

driverless, TELID® 700 beacon protocol

Based on iID® interface protocol V4

\*) in development or on on request

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## TELID® 710-T48P

TELID® 710-D48P is a battery powered temperature sensor beacon for unique object identification, temperature measurement supporting operation with smartphones and other iID® contactless components such as gateways. The product can be attached to metal or nonmetal surfaces, CR2032 battery is replaceable by opening the housing using TELID® 700 opener tool.

Device type:	Temperature sensor beacon	Unit
Mounting	On metal and nonmetal surface, self-adhesive glue pad	
Package	D48P Poly carbonate	
Dimension	D48 x 11	mm
Measurement range	-25°C ... +60°C -13°F ... +149°F	
Accuracy	+/- 1K at -40°C ... +125°C (-40°F ... +257°F) +/- 0.5K at 0°C ... +65°C (32°F ... +149°F)	
Resolution	0.0625	°K
Thermal contact	-	
Product code	<b>14.710.811.000</b>	



## TELID® 710-T64P

TELID® 710-D64P is a battery powered temperature sensor beacon for unique object identification, temperature measurement supporting operation with smartphones and other iID® contactless components such as gateways. The product can be attached to metal or nonmetal surfaces, CR2032 battery is replaceable by opening the housing using TELID® 700 opener tool.

Device type:	Temperature sensor beacon	Unit
Mounting	On metal and nonmetal surface, by screws (see quick start guide)	
Package	D48P Poly carbonate	
Dimension	D64 x 11	mm
Measurement range	-25°C ... +60°C -13°F ... +149°F	
Accuracy	+/- 1K at -40°C ... +125°C (-40°F ... +257°F) +/- 0.5K at 0°C ... +65°C (32°F ... +149°F)	
Resolution	0.0625	°K
Thermal contact	-	
Product code	<b>14.710.821.000</b>	



## TELID® 710-T5070P

TELID® 710-T5070P is a battery powered temperature sensor beacon for unique object identification, temperature measurement supporting operation with smartphones and other iID® contactless components such as gateways. The product can be attached to metal or nonmetal surfaces, 2 AA batteries can be replaced by unscrewing the housing screws.

Device type:	Temperature sensor beacon	Unit
Mounting	On metal and nonmetal surface, self-adhesive glue pad, glue	
Package	T5070P ABS	
Dimension	70 x 49 x 22	mm
Measurement range	-25°C ... +60°C -13°F ... +149°F	
Accuracy	+/- 1K at -40°C ... +125°C (-40°F ... +257°F) +/- 0.5K at 0°C ... +65°C (32°F ... +149°F)	
Resolution	0.0625	°K
Thermal contact	-	
Product code	<b>14.710.831.000*</b>	

\*) in development or on request