

## TELID®310.advance

### RFID temperature data loggers for autoclaving

- semi-passive wireless sensor device
- temperature measurement from -30°C to +140°C
- D27M.a stainless steel case with integrated sensor probe
- contactless data communication by ISO 14443B

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



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This data sheet is subject to change.  
Picture may differ from original product.  
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#### Wireless RFID Interface:

**iID®3000**

closed coupling RFID sensor logger **TELID®300**

ISO 14443B, **iID-L**

13.56 MHz

*RF Communication:*

*Carrier Frequency:*

*Communication Distance:*

0 ... 5 mm, depending on reader antenna and environmental conditions

#### Data Memory:

**EEPROM**

write endurance >10<sup>6</sup> cycles, data retention > 10 years

*Standard Content:*

unique **TELID®** identification number, parameter and calibration data

*Static Memory:*

parameters, calibration data, manufacturer OTP, ID-No

*Recording Capacity:*

up to 8,000 samples (programmable)

*Security Features\*:*

partial read-only protection

#### Real Time Clock:

MEMS stabilized RTC

synchronisation by HOST

#### Temperature Sensor:

semiconductor sensor

*Application:*

autoclaving and cryogenic processes, in air and wet environment

*Total Working Range:*

depending on product type

*Resolution:*

0.1°K

*Accuracy:*

+/- 0.3°K

*Thermal Time Constant:*

2 s ... 1 min

at measurement range, calibration available

depending on product type and environment

#### Operation Modes:

SLEEP, ACTIVE LOGGING

PROGRAM of parameters and remarks, MEASURE mode

CONTINUE, STOP FULL or STOP TIME

stop time programmable

1 s ... 59 s / 1 min ... 59 min programmable

*Basic Functions:*

*Measure Modes:*

*Sample Time:*

#### Environmental Conditions:

IP67

depending on product type

*Working Temperature:*

recommended +25°C

*Storage Temperature:*

absolute

-40°C ... +85°C

0 bar ... 5 bar

#### Housing:

D27M.a

hermetically closed

*Dimension:*

D27 mm, thickness 13 mm

stainless steel and glass

*Material:*

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

*Marking:*

no special requirements, on nonmetal and metal objects

*Mounting instruction:*

#### Energy Source:

Li primary cell, 400 mAh

not replaceable

*Battery:*

depending on using conditions

*Life Time:*

up to 3 years

#### Operation Devices:

**iID®**reader *microsensys*

with USB for desktop application

DESKTOPsmart reader

with RS232TTL, CAN or USB for industrial application

M30-HEAD reader

with USB or Bluetooth for mobile application

POCKETwork

#### Software:

TELID®soft 5.0

Microsoft Windows

\*) in development or on request

## TELID®311.ac

TELID®311.ac is a battery powered RFID temperature data logger especially for capturing of temperature curves in steam sterilizers up to +140°C. The sensor is located in the logger housing. The data communication works passive without any active radio emissions from the logger itself.



Device type	Temperature sensor logger
Dimension Pin Probe	without pin
Measurement Range	<b>-30°C ... +140°C</b>
Time Constant in Water	<b>60s</b>
Product Code	<b>14.311.489.00</b>

## TELID®314.ac

TELID®311.ac is a battery powered RFID temperature data logger with an external fast measurement pin probe especially for capturing of temperature curves in steam sterilizers up to +140°C. The data communication works passive without any active radio emissions from the logger itself.



Device type	Temperature sensor logger with pin probe ace-14, ace-50, ace-100		
Dimension Pin Probe	D2.0mm, length 14mm	D2.0mm, length 14mm	D2.0mm, length 100mm
Measurement Range	<b>-30°C ... +140°C</b>		
Time Constant in Water	min. 10s	2s	2s
in Air	min. 30s	10s	10s
Product Code	<b>14.314.499.01</b>	<b>14.314.499.05</b>	<b>14.314.499.07*</b>

\*) in development or on request