

PRODUCT DATASHEET

TELID® RFID Sensors

TELID® 311.ac

RFID temperature data logger for autoclaves

- semi-passive sensor device
- temperature measurement -15°C ... +140°C
- non flexible hard TAG, case D27M.ac
- contactless data communication 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 and pharma industry, for temperature check in maintenance and quality processes. TELIDs are operating optimal with *microsensys* standard RFID reader.



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RFID in motion

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this data sheet is subject to change
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RFID Technology:	RFID system TELID®300	iID®3000 based on ISO 14443B
Chip Type:	iID-L	closed coupling HF sensor solution
Carrier Frequency:	13.56 MHz	
Communication Rate:	106 kbps	
Communication Distance:	0 ... 5 mm	depending on reader antenna and environmental conditions
Data Memory:	EEPROM read write type	endurance >100.000 cycles, data retention > 10 years
Static Memory:	parameters, calibration data, manufacturer OTP, ID-No	
Recording Capacity:	256 kbit, up to 8,000 samples (programmable)	
Real Time Clock:	quartz stabilized RTC	synchronisation by HOST
Temperature Sensor:	semiconductor sensor with sensor dot outside	
Working Range:	-30°C ... +140°C	
Resolution:	0.125°K	
Accuracy:	+/- 0.5°K	at 0°C ... +65°C
	+/- 2.0°K	at -15°C ... +140°C
Thermal Time Constant:	approx. 10 s	depending on mounting technology
Operating Modes:	SLEEP, ACTIVE LOGGING	
Measure Modes:	LOGGING: STOP FULL or STOP TIME	stop time programmable
Basic Functions:		programming of parameters, item information and measure modes set start time, read header, read data memory, set RF marker calibration data and event limits (optional)
Parameters:		
Sample Time:		1 min ... 59 min programmable
Battery:	Li primary cell, 400 mAh	
Life Time:	up to 3 years	depending on using conditions
Working Conditions:		
Temperature:	-25 °C ... +140 °C	
Pressure:	0 bar ... 5 bar absolute	
Dimensions:	approx. D27 mm, thickness 16 mm	
Protection Class:	IP67	
Case:	D27M.ac	material: stainless steel and epoxy
Marking:	laser printed product type on top	optional unique ID-No
Mounting Instruction:	depending on application	see application note
Appropriate RFID Reader:	PEN reader DESKTOPsmart reader M30-HEAD reader POCKETwork	with RS232TTL, USB or Bluetooth with USB for desktop application with RS232TTL, CAN or USB for industrial application with USB or Bluetooth for mobile application
Software:	TELIDsoft 5.0	Microsoft Windows

Type:	14.311.486.00	14.311.486.10*	*) in development
Memory Capacity:	256	256	kbit
Max. T-Samples:	8,000	8,000	samples
Calibration Option:	-	calibration at 134°C	