

PRODUCT DATASHEET

TELID® RFID Sensors

TELID® 511

RFID temperature data logger

- semi-passive UHF RFID sensor device
- contactless interface compatible ISO 18000-6C
- temperature range -25°C ... +85°C

RFID Sensor TELID® devices are an integral part of *microsensys* iID® system solution. They are very useful for wireless sensors applications in industry, transport and logistics. 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, image is just similar to product,
contact *microsensys* for latest information TELID511 002.docx

RFID Technology:	RFID system TELID®400/500, based on ISO 18000-6C	
Chip Type:	iID®-4000	long distance UHF sensor solution
Carrier Frequency:	868 MHz	also useable at 915MHz
Communication Rate:	up link max.128 kbps, down link max. 640 kbps	
Communication Distance:	0 ... 100 cm	depending on reader antenna and environmental conditions
Data Memory:	EEPROM	read write type endurance >100.000 cycles, data retention > 10 years
Static Memory:	EPC up to 160 bit, TID 96 bit, manufacturer OTP possible	
Data Memory:	up to 1 Mbit	
Recording Capacity:	standard	up to 8,000 samples
Temperature Sensor:	semiconductor sensor	
Working Temperature:	-20°C +90°C	
Sample Rate:	programmable	recommendation: 15 min
Accuracy:	+/- 0.5 K	at 0°C ... +65°C
	+/- 1.0 K	at -25°C ... +85°C
Thermal Time Constant:	approximately 3 min	depending on surrounded material
Clock:	quartz RTC	time synchronization while device programming, 1 min resolution
Logger Operating Mode:	SLEEP, ACTIVE	
Measure Modes:	STOP FULL / STOP END	
Basic Functions:	programming of sensor parameters, read parameters, read memory, get temperature, read ID	
Parameters:	start time, sample time (1min ... 24h), temperature limits, calibration data (optional)	
Battery:	Li-Thionylchlorid	400 mAh
Life Time:	up to 3 years	depending on using conditions no replaceable battery
Working Temperature:	-20°C ... +90°C	
Storage Temperature:	-35°C ... +95°C	short time: 125°C, recommended: 25°C
Dimensions:	approx. D30 mm, thickness 18 mm	
Protection Class:	IP 67	
Packaging:	PEEK pot, epoxy filling (black)	
Marking:	laser printed product type on top	optional unique ID-No
Mounting Instruction:	see application note	
Appropriate RFID Reader:	INDUSTRY0906 UHF reader CASIO or ZEBRA Industrial Handheld Computer*	with RS232TTL, Ethernet or USB interface with UHF reader module
Software:	TELIDsoft (PC and Mobile)	on inquiry and depending on application

Type:	14.511.001*	14.511.002
Data Memory:	1 Mbit	1 Mbit
Max. Samples:	32,000	8,000 limited samples

*) in development or on request