PRODUCT DATASHEET

TELID® RFID Sensors

TELID® 322.3D

RFID acceleration event logger

- semi-passive RFID sensor logger device, high memory
- battery powered, long life time
- contactless data communication ISO 14443, 13.56MHz
- acceleration measurement range 3D, 0…+/-8g, 200Hz
- non flexible hard TAG, package Q54S

RFID Sensor TELID® devices are an integral part of *microsensys* iID® system solution. These devices are very useful for wireless sensor applications in industry, especially for quality check in automotive industry, for vibration measurements in maintenance processes and in transport and logistics. TELIDs are operating optimal with microsensys standard RFID reader.

microsensys GmbH
In der Hochstedter Ecke 2
D 99098 Erfurt

microSensys RFID in motion

TEL +49-361-59874 0
E-MAIL info@microsensys.de
FAX +49-361-59874 17
WEB www.microsensys.de

RFID Technology:	RFID system TELID®300, based on ISO 14443B (18000-3)	
Chip Type:	iID-L	closed coupling HF sensor solution
Carrier Frequency:	13.56 MHz	
Communication Rate:	106 kbps	
Communication Distance:	0 ... 2 cm	depending on reader antenna and environmental conditions
Data Memory:	EEPROM read write type	endurance >100.000 cycles, data retention > 10 years
Data Memory:	approx.. 1 Mbit	
Recording Capacity:	SIMPLE MODE:	approx.. 6000 events
	ADVANCED MODE:	max. 123 events, including wave recording
Acceleration Sensor:	MEMS sensor, 3D (x, y, z-axis)	
Range:	0 ... ±8 g	programmable range: ±2 g, ±4 g or ±8 g
Limit Range:	30 mg ... max.	programmable in steps of 1 mg
Frequency Range:	0 … 100 Hz	programmable bandwidth
Sample Rate:	12.5 Hz, 25 Hz, 50 Hz, 100 Hz, 200 Hz	programmable
Sensitivity:	0.5 mg/√Hz	theoretical
Event Recording:	date and time of events	
Event Types:	LIMIT, FREE FALL or INACTIVITY detection	programmable
Repetition Time:	approx. 10ms, 1s, 10s or 60s (1 s preferred setting)	programmable
Samples per wave:	170 samples per waveform and axis	only ADVANCED MODE
Clock:	quartz RTC	time synchronization while device programming, resolution 1 s
Operating Mode:	ACTIVE or SLEEP	optional: password protected ACTIVE mode
Measure Modes:	STOP FULL	
Recording Mode:	SIMPLE or ADVANCED	
Basic Functions:	programming of sensor parameters, read parameters, read data memory, get current acceleration, read UID	
Parameters:	start time, sample rate, measurement range, bandwidth, shock limit	
Primary Battery:	$LiMnO_2$, 68 mAh	
Life Time:	up to 2 years	depending on using conditions
Working Temperature:	-25°C ... +80°C	
Storage Temperature:	-30°C ... +85°C	recommended 25°C
Dimensions:	54 x 40 mm², thickness max. 4.5 mm	
Packaging:	Q54S	case PA66 GF6 blue, encapsulation epoxy black
Marking:		laser printed product type on top, optional unique ID-No
Mounting Instruction:		glue, power strip or plastic screws, for data communication don't use on metal
Appropriate RFID Reader:	iID PEN or POCKET reader	with RS232TTL or USB or Bluetooth,
	iID DESKTOP reader	with RS232TTL or USB
	M30-HEAD reader	with RS232TTL, RS485 or USB for industrial application
Software:	TELID programming and reading software for Windows PC	

Type :	**14.322.709.10***	**14.322.709.00**	*) in development
Event Types:	only LIMIT	all	
Waveform Recording:	no	yes	