

PRODUCT DATASHEET

TELID® RFID Sensors

TELID® 312

RFID temperature data logger 13.56MHz

- semi passive sensor data logger
- temperature measurement
- non flexible hard TAG, package Q54S
- mountable on metal or nonmetal objects
- contactless data communication based on ISO14443

RFID Sensor TELID® devices are an integral part of *microsensys* iID® system solution. These devices are very useful for wireless sensor applications in industrial solutions, especially in maintenance processes and in building industry. TELIDs are operating optimal with *microsensys* standard RFID stationary and mobile reader devices.



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TELID312-04

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 ... 20 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:		1 Mbit, 16 bit per sample
Real Time Clock:	quartz stabilized	synchronisation by HOST
Temperature Sensor:	semiconductor sensor	
Working Range:	-30°C ... +85°C	
Resolution:	0.1°K	
Accuracy:	+/- 0.5°K	at 0°C ... +65°C
	+/- 1.0°K	at -30°C ... +85°C
Thermal Time Constant:	30 ... 120s	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 MnO ₂ , 125 mAh	
Life Time:	up to 5 years	depending on using conditions
Working Temperature:	-25°C ... +80°C	
Storage Temperature:	-40°C ... +85°C	recommended 25°C
Dimensions:	54 x 40 mm ² , thickness max. 4.5 mm	
Protection Class:	IP 67	
Packaging:	Q54S	material PA66 GF36 blue, epoxy black
Marking:	laser printed product type on top,	optional unique ID-No
Mounting Instruction:	glue, power strip or plastic screws,	on metal or nonmetal objects for data communication don't use on metal
Appropriate RFID Reader:	PEN reader HEAD reader POCKETwork	with RS232TTL, USB or Bluetooth with RS232TTL, CAN or USB for industrial application with USB or Bluetooth
Software:	TELIDsoft 5.0	Microsoft Windows Vista, 7 and 8

Type :	14.312.710.00	14.312.710.10*	*) in development
Memory Capacity:	1M	1M	bit
Max. T-Samples:	approx. 12000	approx. 10000	
Security Event Sensor:	-	approx. 10 events	