PRODUCT DATASHEET

TELID® RFID Sensors

TELID® 311-125°C

RFID temperature data logger

- semi-active sensor device
- temperature measurement -35°C ... +125°C, +/-0.1 K
- non flexible hard TAG, package D27
- 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 industrial solutions, for quality check in food and pharma industry, for temperature check in maintenance processes and transport and logistics. TELIDs are operating optimal with microsensys standard RFID reader.

RFID Technology:	RFID system TELID®300, based on ISO 14443B
Chip Type:	iID-L, iID-3000 closed coupling HF sensor solution
Carrier Frequency:	13.56 MHz
Communication Rate:	106 kbps
Communication Distance:	0 ... 1 cm 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
Data Memory:	256 kbit, up to 8,000 samples (programmable)
Temperature Sensor:	semiconductor sensor
Working Temperature:	-35°C .... +125°C
Resolution:	0. 125 K
Accuracy:	+/- 0.5 K at 0°C … +60°C
	+/- 2.0 K at -35°C … +85°C
Thermal Time Constant:	approximately 3 min mounted on object
Clock:	quartz stabilized RTC
Operating Mode:	ACTIVE or SLEEP
Measure Modes:	STOP FULL or ROLL OVER
Basic Functions:	programming of sensor parameters, read parameters, read memory, get temperature, read UID, histogram analysis
Parameters:	start delay (RTC), sample time (1min … 256min), temperature limits, calibration data (optional)
Battery:	Li Thionylchlorid, 500 mAh
Life Time:	3 … 6 years depending on using conditions
Working Temperature:	-35°C ... +125°C
Storage Temperature:	-40°C ... +90°C (short time 125°C) recommended 25°C
Dimensions:	approx.. D27 mm , thickness 12 mm
Protection Class:	IP 67
Packaging:	PEEK ring, epoxy filling (black)
Marking:	laser printed product type on top, optional unique ID-No
	optional two color printing
Mounting Instruction:	glue or adhesive tape
Appropriate RFID Reader:	PEN reader with RS232TTL, USB or Bluetooth interface
	HEAD reader with RS232TTL, RS485 or USB for industrial application
	DESKTOP RFID read write device with USB

Type :	**14.311.484.04**	**14.311.485.00***	*) in development
Package:	PEEK, epoxy	PEEK/PEEK, epoxy filling	
Temperature Range:	-35°C…+125°C	-25°C...+136°C	