

PRODUCT DATASHEET

TELID® RFID Sensors

TELID® 412.02

RFID temperature transponder UHF band

- passive sensor device
- temperature measurement -40°C ... +160°C
- non flexible hard TAG, package Q72, on metal possible
- contactless data communication ISO 18000-6C

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.



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

This data sheet is subject to change
contact *microsensys* for latest information

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RFID Technology:	RFID system TELID®400	based on ISO 18000-6C
Chip Type:	different	long distance UHF sensor solution
Operating Frequency:	EU Band	
Communication Rate:	up link 128 kbps, down link 640 kbps	
Communication Distance:	0 ... 100 cm	depending on reader antenna and environmental conditions
Object Data Memory:	EEPROM	read write type endurance >100.000 cycles, data retention > 10 years
Static Memory:		parameters, calibration data, manufacturer OTP
Free Memory:	3 kbit	
Temperature Sensor:	semiconductor sensor	
Working Temperature:	-40°C.... +160°C,	type 303: -40°C.... +125°C
Resolution:	0.5 K	
Accuracy:	+/- 0.5 K	at -0°C ... +70°C
	+/- 1.0 K	at -40°C ... +125°C
Thermal Time Constant:	approximately 1 min	mounted on the object
Operating Mode:	PASSIVE SENSOR	
Measure Modes:	ON LINE MEASUREMENT	
Basic Functions:		programming of sensor parameters and object data memory
Parameters:		calibration data (optional)
Battery:	no battery	
Working Temperature:	-40°C ... +160°C / +125°C	
Storage Temperature:	-40°C ... +125°C	recommended <50°C, type 333: +180°C short term
Dimensions:	70 x 18 mm², thickness max. 4 mm	
Packaging:	epoxy glass fiber reinforced, back side half lens shape	colour: black
	type 333.50:	additional stainless steel back side
Marking:	printed label	optional: laser printed unique ID-No
		optional: two colour printing
Mounting Instruction:	glue or plastic screws	using on metal or on plastics possible
Appropriate RFID Reader:	INDUSTRY 0906 reader POCKET UHF CASIO IT-800	with RS232, P-CAN, Ethernet or USB USB, Bluetooth with UHF reader module
Software:	TELID application software for Windows PC and mobile devices on inquiry	

Type :	16.412.303.00	16.412.333.00	16.412.333.50*	*) on inquiry
Package:	epoxy FR4 (planar)	HT epoxy (planar, half lens)	HT epoxy (planar, metal back side)	
Working Temperature:	-40°C...+125°C	-40°C...+160°C	-40°C...+160°C	
Memory:	3 kbit EEPROM	3 kbit EEPROM	3 kbit EEPROM	