PRODUCT DATASHEET

TELID® RFID Sensors

TELID® 243

RFID pressure transponder 13.56MHz

- passive pressure measurement transponder
- ¼" stainless steel fitting with RFID antenna
- hard TAG, customized for Keller pressure sensor
- contactless data communication ISO 14443

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®200	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 >100000 cycles, data retention > 10 years
Static Memory:		parameters, calibration data, manufacturer OTP
Free Memory:	128bit	see version
Pressure Sensor:	piezo-resistive MEMS technology sensor with integrated 16bit ΔΣ ADC	
Working Range:	0 bar … 3 bar / 100 bar	other ranges see down table
Resolution:	16 bit	theoretical 0.045 mbar
Accuracy:	+/- 0.15%FS	equates +/- 4.5mbar
Response Time:	min. 50 ms	incl. temperature and rfid communication
Temperature Sensor:	silicon sensor	
Working Range:	-40°C … +110°C	
Resolution:	0.05 °K	
Accuracy:	typ. +/- 2 °K	
Response Time:	min. 50 ms	incl. pressure and rfid communication
Operating Mode:	PASSIVE SENSOR	
Measure Modes:	ON LINE MEASUREMENT	
Basic Functions:		programming of sensor parameters and data memory commands
Parameters:		calibration data (optional)
Battery:	no battery	
Working Temperature:	-35°C ... +85°C	
Storage Temperature:	-40°C ... +125°C	maximum range
Dimensions:	¼" fitting, SW22, max length 40mm	
Case:		stainless steel, PEEK (black)for RFID antenna
Marking:		no special marking
Using Instruction:		industrial using
Protection Class:	IP67	
Appropriate RFID Reader:	M30-HEAD reader	with RS232TTL or USB
	PEN reader	with RS232TTL, USB or Bluetooth
	POCKETwork	with Bluetooth
Software:	iID driver engine, iID DEMOsoft for Windows,	
	TELID application software for Windows PC and mobile devices on inquiry	

Type :	12.243.439.01	12.243.439.03	12.243.439.04*	12.243.439.*	*) in development
Pressure Range:	0 … 3	0 … 10	0 … 100	…	bar
Memory Capacity:	128	128	128	256k	bit