

PRODUCT DATASHEET

TELID® RFID Sensors

TELID® 281.3Dm

RFID 3D vibration sensor transponder

- wireless passive acceleration sensor device
- 3D vibration measurement 0..1600 Hz, up to +/- 16 g
- mid size hard TAG, mountable on metal objects
- contactless data communication based on ISO14443A

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 condition monitoring and in maintenance processes. TELIDs are operating optimal with *microsensys* standard RFID reader.



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

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RFID Technology:	RFID system iID®3000	closed coupling passive HF sensor solution
Chip Type:	TELID®200 with integrated micro controller	based on ISO 14443A
Carrier Frequency:	13.56 MHz	
Communication Rate:	106 kbps	
Communication Distance:	0 ... 20 mm	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 and UID
Free Memory:		7 kbit
Acceleration Data Memory:	RAM	
Samples:		max. 1536 samples for one axis max. 512 samples per axis in 3D mode
Resolution:		max.16 bit
Acceleration Sensor:	MEMS sensor, 3D (x-, y-, z-axis)	
Recording Range:	0 g ... ±16 g	adjustable max. range: ±2 g, ±4 g, ±8 g or ±16 g
Resolution:	10 bit, 12 bit or 14 bit	independent of settings
Sample Rate:	max. 1.6 kHz	
Frequency Range:	0 Hz ... 1600 Hz	-3 dB, sinus,
	bandwidth: 0.5 * max. Frequency,	independent of settings by digital filter
Temperature Sensor:	optional	
Range:	-40°C ... 85°C	
Resolution:	1°K	
Operating Modes:	PASSIVE RFID SENSOR	
Measure Modes:	ON LINE MEASUREMENT	
Basic Functions:		programming of sensor parameters and object data memory
Parameters:		frequency range, filter limits, amount of samples, range calibration data (optional)
Battery:	no battery	
Working Temperature:	-25°C ... +85°C	
Storage Temperature:	-35°C ... +105°C	recommended 25°C
Dimensions:	D15 mm, thickness max. 3.5 mm	
Packaging:	D14 package	on metal type
Marking:	laser printed product type on top	optional unique ID-No
Weight:	<1 g	
Appropriate RFID Reader:	PEN reader M30 or M18 HEAD reader POCKETwork	with RS232TTL, USB or Bluetooth with RS232TTL or USB for industrial application with USB or Bluetooth
Software:	special TELID application software for Windows and mobile devices	

Type :	12.281.150.10	12.281.150.11*	*) in development
Package:	on metal mounting	on metal mounting	
Acceleration Sensor:	3 axis	3 axis	
Special Features:	-	calibrated temperature sensor	