

# PRODUCT DATASHEET

TELID® RFID Sensors

## TELID® 282.i

### RFID inclination sensor transponder 13.56MHz

- passive acceleration sensor device
- 3D inclination measurement based on earth acceleration
- mid size hard TAG, 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 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

TELID282i-04

<b>RFID Technology:</b>	RFID system TELID®200	iID®3000 based on ISO 14443B
<b>Chip Type:</b>	iID-L	closed coupling HF sensor solution
<b>Carrier Frequency:</b>	13.56 MHz	
<b>Communication Rate:</b>	106 kbps	
<b>Communication Distance:</b>	0 ... 20 mm	depending on reader antenna and environmental conditions
<b>Data Memory:</b>	EEPROM	read write type endurance >100.000 cycles, data retention > 10 years
<b>Static Memory:</b>		parameters, calibration data, manufacturer OTP
<b>Free Memory:</b>	128 bit	see versions
<b>Acceleration Sensor:</b>	MEMS sensor, 3D acceleration (x, y, z-axis)	
<b>Measure Range:</b>	+2.0 g ... -2.0 g	
<b>Resolution:</b>	12 bit	theoretical 1 mg
<b>Application:</b>	inclination measurement of vertical and horizontal areas preferably for inclination changing measurements	
<b>Measure Range:</b>	+60° ... -60°	(+0,87 g ... -0.87 g)
<b>Resolution:</b>	theoretical 0,5°	x-y axis sensor
<b>Temperature Sensor:</b>	semiconductor sensor	optional
<b>Working Temperature:</b>	-40°C .... +85°C	
<b>Resolution:</b>	0.5 K	not calibrated
<b>Operating Mode:</b>	PASSIVE SENSOR	
<b>Measure Modes:</b>	ON LINE MEASUREMENT	
<b>Basic Functions:</b>	programming of sensor parameters and data memory commands	
<b>Parameters:</b>	zero reference at installation, calibration data (optional)	
<b>Battery:</b>	no battery	
<b>Working Temperature:</b>	-25°C ... +85°C	
<b>Storage Temperature:</b>	-40°C ... +125°C	maximum range
<b>Dimensions:</b>	43 x 27 mm <sup>2</sup> , thickness max. 4.0 mm	
<b>Packaging:</b>	front side EP (black), back side PA 6.6 GF30	
<b>Marking:</b>	laser printed product type on top, optional unique ID-No	
<b>Mounting Instruction:</b>	adhesive on metal or nonmetal objects	
<b>Appropriate RFID Reader:</b>	PEN reader	with RS232TTL, USB or Bluetooth
	HEAD reader	with RS232TTL, P-CAN or USB for industrial application
	POCKETwork	with USB or Bluetooth
<b>Software:</b>	TELID282.i application software for Windows PC, consist of TELID282.i initialization app, TELID282.i evaluation app	

<b>Type :</b>	<b>13.282.159.30*</b>	<b>13.282.559.30</b>	*) not for new projects
<b>Package:</b>	Q43special	Q43special	
<b>Memory Capacity:</b>	128	128	bit
<b>Special Features:</b>	-	calibrated	