

# PRODUCT DATASHEET

TELID® RFID Sensors

## TELID® 257

### RFID moisture sensor transponder

- passive conductance sensor device
- slightly moist measurement for flowerpots
- flower label with sensor pin, 4 ... 7 cm long
- contactless data communication based on ISO standard

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.



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RFID in motion

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

TELID257-01.docx

<b>RFID Technology:</b>	RFID system iID®2000/3000	
<b>Chip Type:</b>	iID-A, iID-L	closed coupling, 13.56 MHz, based on ISO 15693 / 14443B
<b>Carrier Frequency:</b>	13.56 MHz	
<b>Communication Rate:</b>	26 / 106 kbps	
<b>Communication Distance:</b>	0 ... 30 mm	depending on reader antenna and environmental conditions
<b>Object Data Memory:</b>	EEPROM	read write type endurance >100.000 cycles, data retention > 10 years
<b>Static Memory:</b>		parameters, calibration and user OTP possible
<b>Free Memory:</b>		2 kbit , optional: 256 kbit
<b>Conductivity Sensor:</b>	gold plates	
<b>Working Range:</b>	1 mS ... 1 µS	on inquiry adjustable display in percent full scale
<b>Resolution:</b>	max. 10 bit	
<b>Sample Rate:</b>	max. 10 Hz	
<b>Temperature Sensor:</b>	semiconductor sensor	optional
<b>Working Temperature:</b>	0°C ... +40°C	
<b>Resolution:</b>	0.5 K	<b>Accuracy:</b> +/- 0.5 K
<b>Thermal Time Constant:</b>	approximately 1 min	
<b>Operating Modes:</b>	PASSIVE SENSOR	
<b>Measure Modes:</b>	ON LINE MEASUREMENT	
<b>Basic Functions:</b>	programming of sensor parameters and object data memory	
<b>Parameters:</b>		start delay calibration data (optional)
<b>Battery:</b>	no battery	
<b>Working Temperature:</b>	-5°C ... +45°C	
<b>Storage Temperature:</b>	-10°C ... +60°C	recommended 25°C
<b>Dimensions:</b>	25 x 25 mm², approx. 3 mm, pin length 45 / 75 mm	
<b>Packaging:</b>		epoxy (black), front side white label
<b>Marking:</b>		one color print, optional unique ID-No
<b>Weight:</b>	-	
<b>Appropriate RFID Reader:</b>	POCKET reader HEAD reader Smart Phones	with USB or Bluetooth with RS232TTL, RS485 or USB for industrial application SAMSUNG Nexus
<b>Software:</b>	TELID application software for Windows PC and mobile devices on inquiry	

<b>Type :</b>	<b>257.245</b>	<b>257.275</b>	*) in development
<b>Package:</b>	EPOXY black	EPOXY black	
<b>PIN length:</b>	45	75	mm
<b>Working Range:</b>	-	-	