

PRODUCT DATASHEET

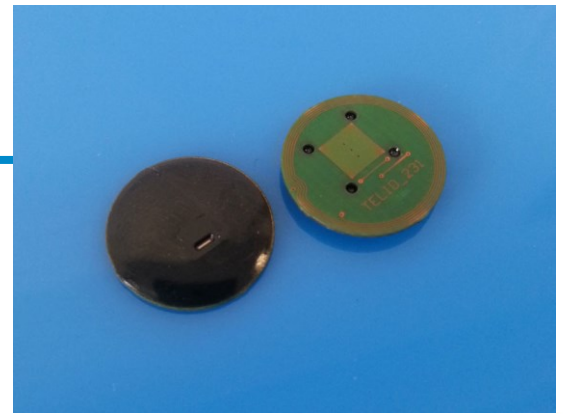
TELID® RFID Sensors

TELID® 231

RFID humidity transponder 13.56MHz

- passive sensor device
- humidity measurement 0%RH ... 100%RH
- non flexible hard TAG, package D14, on metal possible
- 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.



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

TELID231-03

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
Object Data Memory:	EEPROM	read write type endurance >100.000 cycles, data retention > 10 years
Static Memory:		parameters, calibration data, manufacturer OTP
Free Memory:		see version
Humidity Sensor:	capacitive CMOS sensor	
Working Range:	0%RH ... 100%RH	at 0°C ... +80°C
Resolution:	0.7%RH (8bit ADC)	
Accuracy:	+/- 3.0%RH +/- 7.0%RH	at 15°C ... +55°C and 25%RH ... 85%RH at 0°C ... +85°C and 0%RH ... 100%RH
Temperature Sensor:	semiconductor CMOS sensor	
Working Range:	-40°C ... +120°C	maximal
Resolution:	0.2°K (10bit ADC)	
Accuracy:	+/- 0.5°K +/- 1.0°K	at 0°C ... +60°C at -30°C ... +90°C
Thermal Time Constant:	5 ... 30s	depending on mounting technology
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:	0°C ... +85°C	
Storage Temperature:	-40°C ... +120°C	maximum range
Dimensions:	D 14mm, max. H 2.0mm (half lens housing)	
Packaging:		epoxy glass fiber enforced (black)
Marking:		laser printed product type on top, optional unique ID-No optional two color printing
Mounting Instruction:		direct using on metal with type .550 possible
Appropriate RFID Reader:	M30-HEAD reader PEN reader POCKET UNI13 module diverse customized modules	with RS232TTL or USB with RS232TTL, USB or Bluetooth with Bluetooth OEM product for CASIO and PSION devices
Software:	iID driver engine. iID DEMOsoft.	

Type :	12.231.100	12.231.110	12.231.210	12.231.550* *) in development
Package:	epoxy, half lens	epoxy, half lens	epoxy lens	epoxy on metal
Filter Cap:	without cap	with cap	with cap	with cap
Memory Capacity:	128	128	128	128 bit