

# PRODUCT DATASHEET

TELID® RFID Sensor Logger

## TELID® 354 *only for projects*

RFID resistance/temperature data logger,  
256kbit EEPROM transponder memory,

- metallic cylinder form with measurement rod
- active temperature / resistance measurement
- contactless data communication based on ISO14443B

This mini data logger is especially designed as resistance and temperature recording device without any electronic data communication contacts for using under harsh environmental conditions.

Applications:      Soil moisture measurement  
                         Humidity measurements in building industry  
                         Quality control for market garden

This product operates with microsensys standard RFID reader components.



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<b>RFID Technology:</b>		closed coupling RFID system iID® 3000, TELID® 300
<b>Chip Type:</b>		13.56 MHz, based on ISO 14443, iID-L
<b>Carrier Frequency:</b>	13.56 MHz	<b>Communication Rate:</b> 106 kbps
<b>Communication Distance:</b>	0 ... 20 mm	dependent on reader antenna and metal environment
<b>Memory:</b>	256 kbit	EEPROM read write type
<b>Static Memory:</b>		endurance >100.000 cycles, data retention > 10 years
<b>Free Memory:</b>		calibration data, ID-No, manufacturer OTP
<b>Measurement Memory:</b>		64 Byte free for customer
		up to 2.048 samples, 1x temperature and 3x conductivity per set
<b>Temperature Sensor:</b>		semiconductor sensor
<b>Working Temperature:</b>	0°C ... +45°C	<b>Resolution:</b> 0.5 K
<b>Accuracy:</b>	+/- 0.5 K	at 0°C ... +45°C
<b>Position of the sensor:</b>		at the peak of the stainless steel pin (deepest point)
<b>Conductivity Sensor:</b>		stainless steel pin with ground reference
<b>Working Range:</b>	1 k ... 1 MOhm	<b>Resolution:</b> 100 Ohm
<b>Humidity Equivalent:</b>		depending on application
<b>Position of the sensors:</b>		0mm / 50mm / 100mm from the peak of the stainless steel pin
<b>Logger Operations:</b>		
<b>Real Time Clock:</b>		quartz stabilized, battery powered, synchronisation by HOST
<b>Sample Time:</b>	1 ... 256 h	programmable in 1 h steps
<b>Operation Mode:</b>	ACTIVE / SLEEP	
<b>Measure Mode:</b>	STOP FULL / ROLL OVER	active, RTC triggered
<b>Storage Temperature:</b>	-25°C ... +65°C	
<b>Dimensions:</b>	electronic	approx. D 30 mm, max. TH 15 mm
	measurement rod	approx. D 6 mm, Length up to 1.000 mm
<b>Packaging Material:</b>	stainless steel, black EP on top	
<b>Marking:</b>	standard laser printed	
<b>Appropriate RFID Reader:</b>	PEN reader, CFC reader with PDA, M30-HEAD and others	
<b>Software:</b>	TELID3E.net Class Library, application software for mobile devices on inquiry	

<b>Type:</b>	14.354.483.00	14.354.485.00	14.354.487.00	
<b>Optimal Measure Range:</b>	0.1 ... 14	0.1 ... 14	0.1 ... 14	kOhm
<b>Rod Length:</b>	300	500	700	mm
<b>Battery Life Time:</b>	up to 4 years			years

TELID354 004

