

# PRODUCT DATASHEET

iID® Transponder

## U-TAG TIE-i

### UHF-RFID cable tie transponder

- passive RFID communication ISM UHF band, EPC Class1 Gen2 or ISO 18000-6C
- miniature UHF TAG module integrated
- EEPROM memory for unique identification and data storage in IoT applications
- designed for harsh environmental part tagging, tool management solutions

These transponder devices are an integral part of *microsensys* iID® system solutions.

This TAG operates with *microsensys* standard RFID reader components.



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**microSensys**  
RFID in motion

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

U-TAG TIE-i 001.docx

<b>RFID Technology:</b>	UHF close coupling system iID®4000, based on ISO 18000-6c, EPC Class1 Gen2	
<b>Chip Types:</b>	Impinj Monza 5, others on inquiry	
<b>Frequency Range:</b>	preferably EU ISM Band 860-868MHz	
<b>Polarisation:</b>	without polarisation, inductive coupling	
<b>Communication Rate:</b>	forward link: 40-160kBit/s return link: 40-640kBit/s with close coupling UHF readers	
<b>Communication Distance:</b>	0 ... 20 mm in any case depending on reader system and environmental conditions	
<b>Memory:</b>	EEPROM endurance 100000 cycles, data retention 50 year (T<55°C) features depending on RFID chip	
<b>Memory Capacity:</b>	see type information	
<b>User Memory:</b>	see type information	
<b>Special Functionality:</b>	-	
<b>Operating Temperature:</b>	-20°C ... +85°C	
<b>Storage Temperature:</b>	-20°C ... +85°C	
<b>Dimensions:</b>	195x8.5 (4.6) mm	
<b>Packaging Material:</b>	PA66, black epoxy	
<b>Mounting Instructions:</b>	cable tie	
<b>Protection Class:</b>	IP67	
<b>Marking:</b>	no marking	
<b>Appropriate RFID Reader:</b>	POCKETwork UHFcc wireless handheld reader PENsolid UHF wireless pen reader INDUSTRY 0906 UHF plus M18 UHFcc stationary industrial read write unit others possible	
<b>HOST Command Set:</b>	see actual API documentation of <i>microsensys</i> iID® driver engine	

<b>Type :</b>	<b>18.933.777.000</b>	
<b>Chip Type:</b>	Monza 5	
<b>TID:</b>	96	bit
<b>EPC memory:</b>	128	bit
<b>User memory:</b>	0	kbit
<b>Communication Distance:</b>	10**	mm

\*in development or on inquiry, \*\*measured with M18 UHF antenna