

# PRODUCT DATASHEET

iID® Transponder

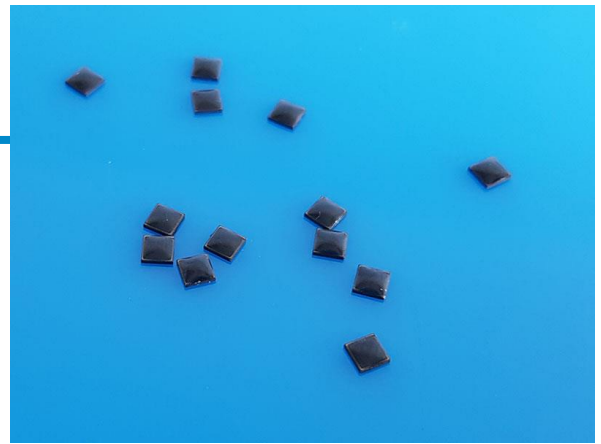
## Qmini U-TAG

### UHF-RFID miniature transponder

- passive RFID communication ISM UHF band, EPC Class1 Gen2 or ISO 18000-6C
- miniature square TAG, Q1.6 and Q2.0
- very small TAG size
- EEPROM memory
- designed for small item tagging, tool management solutions, aircraft and automotive part tagging

These transponder device is an integral part of *microsensys* iID® system solution.

This TAG operates with *microsensys* standard RFID reader components and high sensitive demodulators.



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RFID in motion

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

Qmini UTAG 002.docx

<b>RFID Technology:</b>	UHF closed coupling system iID®4000,	based on ISO 18000-6c, EPC Class1 Gen2
<b>Chip Types:</b>		NXP UCODE 7, UCODE 8, UCODE DNA
<b>Frequency Range:</b>	preferably EU ISM Band 860-868MHz	
<b>Polarisation:</b>		without polarisation, inductive coupled
<b>Communication Rate:</b>		forward link: 40-160kBit/s return link: 40-640kBit/s
<b>Communication Distance:</b>	0 ... 15 mm	with closed coupling UHF readers
		in every case depending on reader system and environmental conditions
<b>Memory:</b>	EEPROM	endurance 100000 cycles, data retention 50 year (T<55°C)
<b>Memory Capacity:</b>	128 bit EPC, 96 bit TID	features are depending on used RFID chip
<b>User Memory:</b>	-	UCODE 8
<b>Special Functionality:</b>		see application note <i>microsensys</i>
<b>Operating Temperature:</b>	-25°C ... +85°C	
<b>Storage Temperature:</b>		-45°C ... +125°C (for short time +150°C)
<b>Dimensions:</b>	1.6 x 1.6 mm <sup>2</sup> , TH 0.4 mm (max) 2.0 x 2.0 mm <sup>2</sup> , TH 0.6 mm (max)	Type: 100 Type: 101
<b>Packaging Material:</b>	black epoxy	
<b>Mounting Instructions:</b>	glue	no using on metal plane side on top
		recommended glue: 2K-EP "plus endfest 300" UHU GmbH Germany
<b>Protection Class:</b>	IP67	
<b>Marking:</b>	no marking	
<b>Appropriate RFID Reader:</b>	POCKETwork UHFcc PENsolid UHF INDUSTRY 0906 UHF plus M18 UHFcc others possible	wireless handheld reader wireless pen reader stationary industrial read write unit
<b>HOST Command Set:</b>	see actual API documentation of <i>microsensys</i> iID® driver engine	

<b>Type :</b>	<b>19.948.100.00</b>	<b>19.948.101.00</b>	<b>19.943.101.00*</b>	*on inquiry
<b>Chip Type:</b>	UCODE 8	UCODE 8	UCODE DNA	
<b>User Memory:</b>	0	0	up to 3k	bit
<b>Dimension:</b>	1.6 x 1.6 x 0.4	2.0 x 2.0 x 0.6	2.0 x 2.0 x 0.6	mm <sup>3</sup>
<b>Communication Distance:</b>	8	12	12	mm

measured with M18 UHF antenna