

# PRODUCT DATASHEET

iID<sup>®</sup> Transponder

## S43 UTAG<sup>special</sup>

### robust UHF TAG

- passive RFID communication ISM UHF band, EPC Class1 Gen2 EEPROM memory
- EEPROM memory
- TAG for plastic devices and metal objects
- using under high temperature and harsh environmental conditions
- especially designed for asset management of non-metal and metal objects

This transponder device is an integral part of *microsensys* iID<sup>®</sup> system solutions.



*microsensys* GmbH  
In der Hochstedter Ecke 2  
D 99098 Erfurt

**microSensys**  
RFID in motion

TEL +49-361-59874 0  
E-MAIL info@microsensys.de  
WEB www.microsensys.de  
This data sheet is subject to change  
Contact us for latest information

S43-UTAG 001

<b>RFID Technology:</b>	far field UHF	based on ISO 18000-6c, EPC Class1 Gen2
<b>Chip Types:</b>		NXP G2XM
<b>Frequency Range:</b>	860-960MHz	
<b>Polarisation:</b>		linear
<b>Communication Rate:</b>		forward link: 40-160kBit/s return link: 40-640kBit/s
<b>Communication Distance:</b>	0 ... 1.5 m	(tested on polycarbonate) dependent on reader system and environmental conditions
<b>Memory:</b>	EEPROM	endurance 100000 cycles, data retention 50 year (T<55°C) features are depending on used RFID chip
<b>Memory Capacity:</b>	standard	512bit User memory, 240 bit EPC memory, 64 bit TID memory
<b>Special Functionality:</b>		see chip manufacture data sheet
<b>Operating Temperature:</b>	-40°C ... +85°C	
<b>Storage Temperature:</b>		-45°C ... +180°C, max. 180°C for short term
<b>Dimensions:</b>	43 x 27 mm	package type S43 total thickness max. 4.5mm
<b>Packaging Material:</b>	plastic case with epoxy	
<b>Mounting Instructions:</b>	see application note	
<b>Marking:</b>	laser printed	
<b>Appropriate RFID Reader:</b>	POCKET UHF CASIO IT-800 UHF INDUSTRY 0906 UHF others possible	pocket reader handheld industry computer stationary reader with integrated or separate antenna
<b>HOST Command Set:</b>	see actual API documentation of <i>microsensys</i> iID <sup>®</sup> driver engine	

<b>Type :</b>	-	
<b>Chip Type:</b>	NXP G2XM	
<b>Data Retention:</b>	50	years
<b>Case Material:</b>	plastic case with epoxy	