

PRODUCT DATASHEET

iID® Transponder

MINI-TAGspecial 4.5

HF-RFID miniature transponder, for extreme environmental conditions, mounting in metal

- passive RFID communication 13.56 MHz
- round TAG, diameter 4.5 (5.0) mm
- PEEK packaging
- for mounting in metal surface
- 64 kbit, 16 kbit or 1.3 kbit EEPROM memory
- designed for measuring tool management solutions, aircraft and automotive part tagging

This transponder device is an integral part of *microsensys* iID® system solution is powered by mic3® technology. This TAG operates with *microsensys* standard RFID reader components and high sensitive demodulators.



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microSensys
RFID in motion

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

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RFID Technology:	closed coupling RFID system iID®2000, ISO 15693 or proprietary		
Chip Type:	I-CODE®, iID®-G, iID®-K others on request		
Carrier Frequency:	13.56 MHz		
Communication Rate:		down link 26.4 kbps or 106 kbps	
Communication Distance:	0 ... 5 mm	dependent on reader antenna, chip type and metal environment	
Memory:	EEPROM	endurance >100.000 cycles, data retention > 10 years	
Memory Capacity:		64 kbit, 16 kbit and 896 bit EEPROM available	
Special Functionality:		see data sheet of chip manufacturer	
Operating Temperature:	-25°C ... +65°C		
Storage Temperature:	-25°C ... 150°C	long term max. +85°C, short time 150°C	
Dimensions:	D4.5 +/-0.1 mm, TH 2.2 mm	outside of metal D5.0 mm, TH 0.8 mm	
Packaging Material:	PEEK or PPSU, back side epoxy	inlet mixed ferrite epoxy	
Mounting Instructions:		material in black, blue or nature colour, depending on the availability using flat in metal possible plane side on top	
Marking:	no marking	recommended glue: 2K-EP “plus endfest 300” UHU GmbH Germany optional colour marking	
Appropriate RFID Reader:	PEN reader POCKET reader K3 M18 HEAD UNI13 or Q10	with RS232TTL, USB or Bluetooth interface, with USB and Bluetooth interface especially for mobile data capture with RS232TTL, USB read write module with K3, for microsensys OEM partner only	
HOST Command Set:	see actual API documentation of microsensys iID® driver engine or data sheets of silicon chip manufacturer		
Software:	different software for Windows PC or mobile devices available, for application software please ask at info@microsensys.de		

Type :	10.26.515*	10.54.515*	10.47.515	* not for new projects
Chip Type:	iID-K	iID-G	SLIX-S	
RFID Standard:	ISO 14443B	ISO 15693-2	ISO 15693	
Memory:	64,000; EEPROM	16,000; EEPROM	1,300; EEPROM	bit
Communication Rate:	106	26.4	26.4	kbps
Communication Distance:	1.5	2	2	mm
measured with PENmini				