

# PRODUCT DATASHEET

iID<sup>®</sup> Transponder

## D14-TAGspecial

HF-RFID coin size transponder, for industrial environmental conditions and using on metal

- passive RFID communication 13.56 MHz
- round TAG, diameter 15 mm
- EPOXY packaging, Ferrite substrate
- for mounting on metal objects
- 2 kbit up to 64 kbit memory capacity
- designed for item and object tagging

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



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RFID in motion

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

D14sp-TAG 005.c

<b>RFID Technology:</b>	closed coupling RFID system iID <sup>®</sup> 2000/3000, ISO 15693 or 14443
<b>Chip Type:</b>	SLIX, iID <sup>®</sup> M, iID <sup>®</sup> X, iID <sup>®</sup> G, iID <sup>®</sup> K others on request
<b>Carrier Frequency:</b>	13.56 MHz
<b>Communication Rate:</b>	down link 26.4 kbps or 106 kbps
<b>Communication Distance:</b>	0 ... 20 mm dependent on reader antenna, chip type and metal environment
<b>Memory:</b>	EEPROM endurance >10 <sup>5</sup> cycles, data retention > 10 (50) years FRAM endurance >10 <sup>12</sup> cycles, data retention > 10 years
<b>Memory Capacity:</b>	1, 2, 16, 64 kbit available
<b>Special Functionality:</b>	iID <sup>®</sup> X type is X ray suitable, see data sheet of chip manufacturer
<b>Operating Temperature:</b>	-25°C ... +85°C
<b>Storage Temperature:</b>	-45°C ... +125°C short time 150°C (1h)
<b>Dimensions:</b>	D 15 mm, max. TH 2.5 mm, half lens housing, one side EP
<b>Packaging Material:</b>	EPOXY ferrite substrate
<b>Mounting Instructions:</b>	EPOXY material in black on top, other colours on inquiry not using flat in metal plane side on ground recommended glue: see application note
<b>Marking:</b>	laser printed
<b>Appropriate RFID Reader:</b>	PEN reader with RS232TTL, USB or Bluetooth interface, POCKET reader with USB and Bluetooth interface especially for mobile data capture UNI13 or Q10 13.56 MHz read write module, for microsensys OEM partner only
<b>HOST Command Set:</b>	see actual API documentation of microsensys iID <sup>®</sup> driver engine or data sheets of silicon chip manufacturer
<b>Software:</b>	different software for Windows PC or mobile devices available, for application software please ask at info@microsensys.de

Type:	12.32.550*	12.47.550	12.54.550	12.82.550*	12.26.550*	*on inquiry
<b>Special Features:</b>	-	extreme long life	-	Xray suitable	high security	
<b>Chip Type:</b>	EM4135	SLIX-S	iID-G	iID-X	iID-K	
<b>RF Standard:</b>	ISO 15693	ISO 15693	ISO 15693-2	ISO 15693	ISO 14443-B	
<b>Memory:</b>	2; E <sup>2</sup> PROM	1.28; E <sup>2</sup> PROM	16; E <sup>2</sup> PROM	16; FRAM	64; E <sup>2</sup> PROM	kbit
<b>Data Retention:</b>	>10	>50	>10	>10	>10	years
<b>Commun.Rate:</b>	26.4	26.4	26.4	26.4	106	kbps
<b>Write Time:</b>	5	5	5	<0.5	5	ms