

# PRODUCT DATASHEET

iID<sup>®</sup> Transponder

## R18/D18-TAGmodule

HF-RFID transponder module for integration in industrial and long life applications

- passive RFID communication 13.56 MHz
- 18 mm RING-TAG module
- EPOXY glob top
- version for usage non-metal surfaces
- EEPROM memory with 50 years data retention
- designed for part and equipment tagging

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



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**microSensys**  
RFID in motion

This data sheet is subject to change  
Contact us for latest information

R18-D18-TAGmodule 003.docx

<b>RFID Technology:</b>	close coupling RFID system iID@2000	compatible ISO 15693 / NFC forum type 5
<b>Chip Type:</b>		I-Code SLIX-S others on request
<b>Carrier Frequency:</b>	13.56 MHz	
<b>Communication Rate:</b>	down link 26.4 kbps	
<b>Communication Distance:</b>	0 ... 25 mm on non-metal surface 0 ... 10 mm on metal surface*	dependent on reader antenna, chip type with additional shielding (only for integration)
<b>Memory:</b>	EEPROM	endurance >100.000 cycles, data retention >
<b>Memory Capacity:</b>		1.3 kbit EEPROM
<b>Data retention:</b>		50 years (depending on environmental conditions)
<b>Special Functionality:</b>		see data sheet of chip manufacturer
<b>Operating Temperature:</b>	-25°C ... +55°C	
<b>Storage Temperature:</b>	-45°C ... +65°C	long term max. +55 °C, short time +85 °C
<b>Dimensions:</b>	D 18 mm (outside), approx. D 11 mm (inside), max. TH 1.5 mm	
<b>Packaging Material:</b>	only epoxy glob top on chip	
<b>Mounting Instructions:</b>	for integration in plastic housings	no usage without housing
<b>Marking:</b>	none	
<b>Appropriate RFID Reader:</b>	PEN reader POCKET reader  UNI13 or M30 HEAD	with RS232TTL, USB or Bluetooth interface with USB and Bluetooth interface especially for mobile data capture read write module, for <i>microsensys</i> OEM partners only
<b>HOST Command Set:</b>	see actual API documentation of <i>microsensys</i> iID <sup>®</sup> driver engine or data sheets of silicon chip manufacturer	

<b>Type :</b>	<b>13.47.032.04</b>
<b>Chip Type:</b>	SLIX-S
<b>Standard:</b>	ISO 15693
<b>User Memory:</b>	1.3
<b>Communication Distance:</b>	up to 25

kbit  
mm