

# PRODUCT DATASHEET

iID<sup>®</sup> Transponder

## Label 1836-DUALTAGspecial

### DUAL BAND UHF/HF RFID transponder

- passive RFID communication ISM UHF band + HF band (ISO15693)
- EPC Class1 Gen2 + NFC compatible
- Shared HF and UHF accessible EEPROM memory
- Mounting by glue or adhesive pad on non-metal or metal objects
- especially designed for facility management, mobile maintenance and asset management
- custom single-color print optional (including BC/MC/QR)

This transponder device 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 microsensys for latest information Label 1836-DUALTAGsp 010

<b>RFID Technology:</b>	Near field UHF RFID system iID <sup>®</sup> 4000, ISO 18000-63, EPC Gen2v2 Near field HF RFID system iID <sup>®</sup> 2000, ISO15693 / 18000-3, NFC forum type 5 compatible em   echo-V
<b>Chip Types:</b>	
<b>Frequency Range:</b>	UHF: preferably EU ISM Band 860-868MHz, HF: 13.56MHz
<b>Polarisation:</b>	linear
<b>Communication Rate:</b>	UHF: forward link: 40-160kBit/s, return link: 40-640kBit/s HF: 26.4 kbps
<b>Communication Distance:</b>	see type information dependent on reader system and environmental conditions
<b>Memory:</b>	EEPROM, endurance min 100.000 cycles, data retention min 50 years (T<55°C)
<b>Memory Capacity:</b>	Up to 480-bit EPC/UII encodings, 64 bit HF UID, 96 bit UHF TID memory
<b>User Memory:</b>	248 Byte maximum user memory (HF+UHF)
<b>Sensor Functionality:</b>	-
<b>Special Functionality:</b>	dual frequency, shared memory
<b>Environmental:</b>	
<b>Operating Temperature:</b>	-25°C ... +65°C
<b>Storage Temperature:</b>	-40°C ... +80°C
<b>IP Code</b>	64
<b>Dimensions</b>	approx. 20 x 38 mm, max. TH 4.5 mm
<b>Packaging Material:</b>	chip in multi ferrite layer packaging, front side clear PU half flexible, minimum bending radius =50mm hermetic encapsulation
<b>Packaging Units:</b>	on 180 x 290 mm page, 28 pieces per page
<b>Mounting Instructions:</b>	self-adhesive, direct on-metal use possible
<b>Marking:</b>	single color print, optional custom single color print with barcode or QR
<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 <i>microsensys</i> OEM partners only
<b>HOST Command Set:</b>	see API documentation of <i>microsensys</i> iID <sup>®</sup> driver engine, ISO18000-3 or ISO18000-6
<b>Software:</b>	software for Windows PC or mobile devices available, for application software please contact <a href="mailto:info@microsensys.de">info@microsensys.de</a>

<b>Type:</b>	<b>On metal</b>	
<b>Product code:</b>	16.380.686.00	
<b>Special Features:</b>	Operation on metal or non metal surface	
<b>Communication Distance HF:</b>	15	mm
<b>Communication Distance UHF:</b>	15 / 50 (non metal / metal)	mm
<b>Chip Type:</b>	Em   echo-V	
<b>RF Standard:</b>	ISO 15693, ISO 18000-6	

\*in development or on inquiry