

# PRODUCT DATASHEET

iID® Transponder

## U-LABEL 1836

### UHF LABEL for item management

- passive RFID communication ISM UHF band, EPC Class1 Gen2
- EEPROM memory
- flexible mounting on flat and slightly bent surfaces
- silicone-free for use in special environments
- designed especially for asset management, facility management and item tagging

This transponder device is an integral part of *microsensys* iID® system solutions. Our manufacturing process allows customized printing with text, graphics or optical codes and customized programmed memory.

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

**microSensys**  
RFID in motion

U-LABEL 1836-001

<b>RFID Technology:</b>	far field UHF	based on EPC global Class 1 Gen2, ISO18000-6C
<b>Chip Types:</b>		UCODE 8, Monza 6
<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>	up to 300 mm	dependent on reader system and special environmental conditions
<b>Memory:</b>	EEPROM	endurance 100000 cycles, data retention 50 year (T<55°C) features depending on RFID chip
<b>Memory Capacity:</b>		see type information
<b>User Memory:</b>		see type information
<b>Special Functionality:</b>		optional security features
<b>Operating Temperature:</b>	-40°C ... +80°C	
<b>Storage Temperature:</b>		-40°C ... +85°C, recommended 21°C
<b>Dimensions:</b>	20x38 mm total thickness approx. 3 mm	
<b>Label Material:</b>	flexible adhesive glue pad, Poly Urethane sealing	
<b>Mounting Instructions:</b>		self adhesive, usage on metal and non metal surfaces (depending on reader)
<b>Protection Class:</b>	IP64	
<b>Marking:</b>	optional custom unicolor printing (optical code, text, graphics)	
<b>Optional:</b>		chip initialization, unique identification number
<b>Delivery Format:</b>	on A4 sheet	28 pieces per sheet
<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 current API documentation of <i>microsensys</i> iID® driver engine	

<b>Type :</b>	<b>17.933.616.000</b>	<b>16.935.616.000*</b>	
<b>Chip Type:</b>	Monza 4QT	Monza r6-P	
<b>TID:</b>	96 (48)	96 (48)	bit
<b>EPC memory:</b>	up to 128	up to 128	bit
<b>User memory:</b>	512	up to 64	bit
<b>Retention:</b>	50	50	years

\*in development or on inquiry