### MINI-TAGspecial U8.5

**close coupling UHF RFID TAG on metal**
- passive RFID communication ISM UHF band, EPC Class1 Gen2
- PEEK / EPOXY packaging
- using on non-metallic and metallic material
- mounting flat in metal possible
- EEPROM memory
- especially designed for asset management of metal and non-metal objects

These transponder device is an integral part of microsensys iID® system solutions.

### RFID Technology:
- near field RFID system iID®4100, based on ISO 18000-6c, EPC Class1 Gen2
- Impinj Monza 4QT or NXP UCODE G2XM

### Chip Types:
- appropriate RFID Reader: POCKET smart UHF P3 antenna, mini handheld reader
- PENsolid Bluetooth Mini Reader
- INDUSTRY UHF0605 stationary reader with external P3 antenna

### Frequency range:
- 868MHz (European band)
- -8 dBm
- linear
- forward link: 40-160kBit/s
- return link: 40-640kBit/s

### Min. Operating Power:
- linear

### Communication Rate:
- forward link: 40-160kBit/s
- return link: 40-640kBit/s

### Communication Distance:
- 0 … 10 mm on non-metal
- 0 … 10 mm on metal
- dependent on reader system and environmental conditions

### Memory:
- EEPROM endurance 100000 cycles, data retention 50 year (T<55°C)

### Memory Capacity:
- standard 512 bit user memory, 240 bit EPC memory, 64 bit TID memory

### Special Functionality:
- see chip manufacture data sheet

### Operating Temperature:
- -40°C ... +85°C

### Storage Temperature:
- -45°C ... +150°C
- max. +180°C for short time

### Dimensions:
- Ø 8,5 +/- 0,1 mm, TH 2 mm

### Packaging Material:
- PEEK case with EPOXY

### Mounting Instructions:
- using flat in metal plane and printed side on top

### Marking:
- laser printed (PEEK case)
- optional: graphic printing

### Appropriate RFID Reader:
- HOST Command Set: see actual API documentation of microsensys iID® driver engine

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<thead>
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<th>Type</th>
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<th>18.941.500.00*</th>
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<tr>
<td>Chip Type</td>
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<td>NXP UCODE G2XM</td>
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<tr>
<td>EPC/User Memory</td>
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<td>Data Retention</td>
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<td>Communication Distance</td>
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*) on inquiry