

# PRODUCT DATASHEET

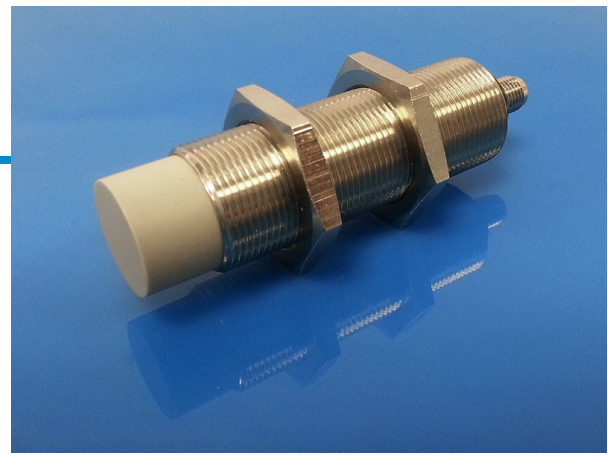
iID<sup>®</sup> Read Write Interfaces

## M18 UHF ANTENNA

### UHF antenna for industrial application

The integrated industry antenna is designed for RFID UHF applications and can be used under harsh industrial environments. This device is available with standard RF connectors (SMA). Its designed as part of iID<sup>®</sup> 4000 *microsensys* system.

*microsensys* offers an attractive component platform for RFID solutions – from transponder over smart readers to practical software tools



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This data sheet is subject to change.  
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ANT UHF M18-01

|                               |  |  |
|-------------------------------|--|--|
| <b>RFIDSystem:</b>            | UHF, iID <sup>®</sup> 4000                       |  |
| <b>Standards:</b>             |  | especially designed for ISO 18000—6 RFID reader with external antenna                              |
| <b>Chip Solutions:</b>        |  | no requirements, independent from RFID chip type<br>practicable for small closed coupling UHF-TAGs |
| <b>Basics:</b>                | closed coupling industrial antenna<br>near field |  |
| <b>RFID Band:</b>             | 868 MHz EU RFID                                  |  |
| <b>Application:</b>           | harsh industrial environment                     |  |
| <b>Operating Distance:</b>    | 0 ... 5 cm                                       | depending on transponder type and reader type  |
| <b>Frequency Range:</b>       |  | 865 MHz - 870 MHz  |
| <b>Field Direction:</b>       |  | front side<br>magnetic field   |
| <b>Impedance:</b>             |  | 50 Ohm   |
| <b>VSWR:</b>                  |  | <1.5:1   |
| <b>RF Connector:</b>          |  | standard SMA female  |
| <b>Max. RF Power:</b>         |  | 2 W  |
| <b>Mechanicals:</b>           |  |  |
| <b>Device Size:</b>           | D18 mm (M18x1.5), L 68 mm                        |  |
| <b>Casing Material:</b>       | plastic cup, stainless steel                     |  |
| <b>Mounting:</b>              | mountable with 2 nuts                            | please note metal environments   |
| <b>Operation Temperature:</b> | -10°C ... +70°C                                  |  |
| <b>Storage Temperature:</b>   | -25°C ... +85°C                                  |  |
| <b>Protection Class:</b>      | IP 65  | for industrial   |

|                                  |                     |                            |
|----------------------------------|---------------------|----------------------------|
| <b>Type:</b>                     | <b>41.40.000.01</b> | <b>41.40.800.00*</b>       |
| <b>RF:</b>                       | near field          | tbd                        |
| <b>RFID Band:</b>                | 868 MHz EU RFID     | tbd                        |
| <b>RFID Frontend Controller:</b> | only antenna        | with integrated electronic |

\*) in development or delivery only for special projects