



## Wireless ultrasonic sensor

WS-UCC2500-F406-B15-B41-01-01

- Battery operated
- Data transfer via LoRaWAN
- Bluetooth interface for commissioning, parameterization and diagnostics

Wireless ultrasonic sensor with LoRaWAN interface



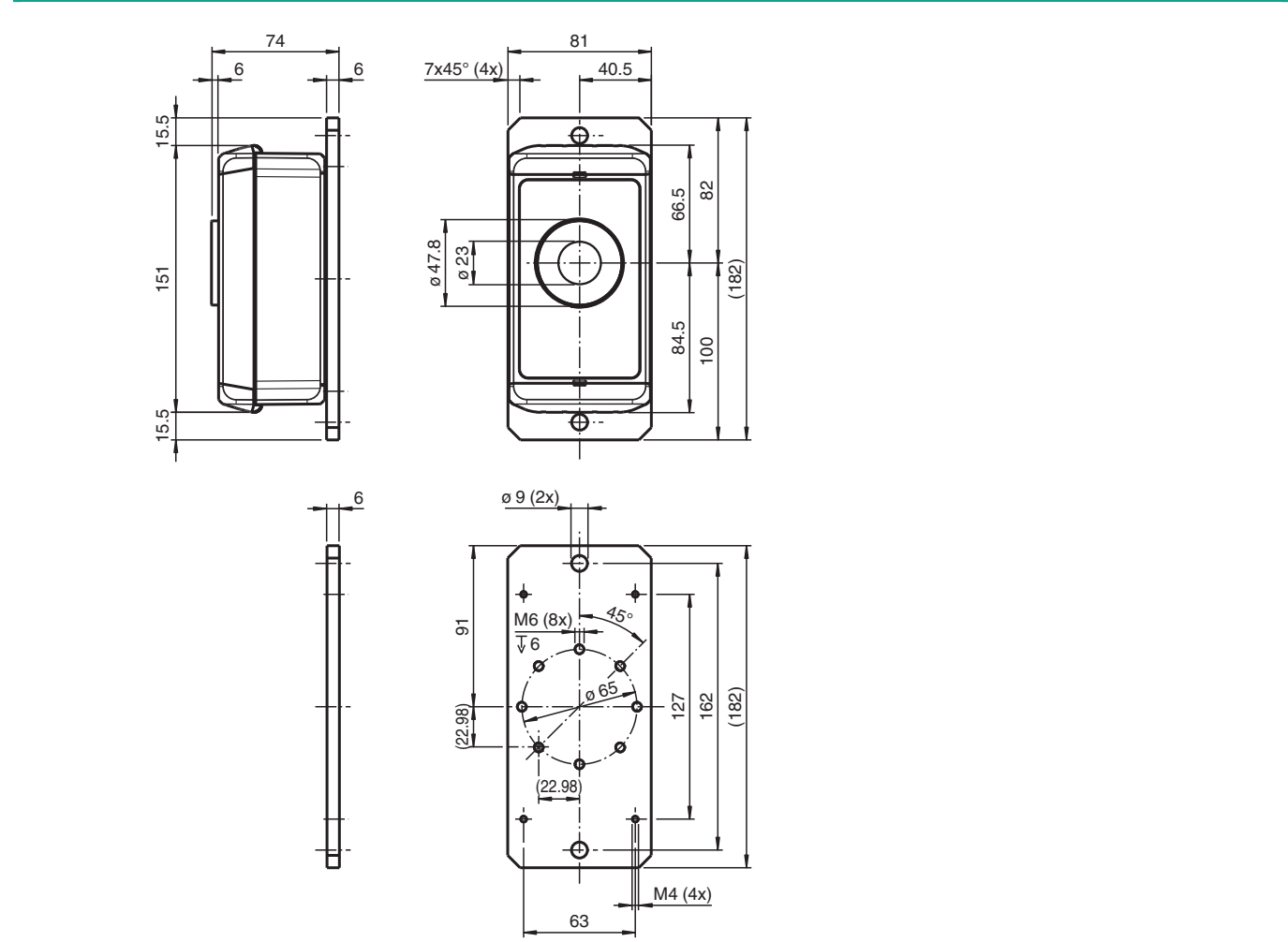
### Function

The wireless ultrasonic sensor can be used for remote monitoring of fill level.

The fill level, but also other parameters such as geo data and sensor status data, are measured or recorded in configurable time intervals and transmitted to a counterpart in the LoRa network from where they are available for pure display or further processing.

The sensor is parameterised via a Bluetooth interface using a mobile device (smartphone or tablet) and the WILSENcontrol app belonging to the sensor.

## Dimensions



## Technical Data

|                 |                   |
|-----------------|-------------------|
| Frequency range | 2402 ... 2480 MHz |
|-----------------|-------------------|

## Technical Data

### Interface 2

|                            |                                        |
|----------------------------|----------------------------------------|
| Interface type             | LoRaWAN                                |
| Specification              | LoRaWAN interface specification V1.0.3 |
| Device type                | LoRaWAN class A device                 |
| Transmitter frequency      | 868 MHz                                |
| Transmitter radiated power | + 8 dBm                                |
| Frequency range            | 863 ... 870 MHz (Europe)               |
| Transfer frequency         | 5 min ... 24 h                         |

### Directive conformity

|                                                |                                                                                                                |
|------------------------------------------------|----------------------------------------------------------------------------------------------------------------|
| Electromagnetic compatibility                  |                                                                                                                |
| Directive 2014/30/EU                           | EN 301 489-1 V2.2.0:2017<br>EN 301 489-3 V2.1.1:2019<br>EN 301 489-17 V3.2.0:2017<br>EN 301 489-19 V2.1.0:2017 |
| Radio and telecommunication terminal equipment |                                                                                                                |
| Directive 2014/53/EU                           | EN 300 220-2 V3.1.1:2017<br>EN 300 328 V2.1.1:2016<br>EN 303 413 V1.1.1:2017                                   |
| RoHS                                           |                                                                                                                |
| Directive 2011/65/EU (RoHS)                    | EN 50581:2012-09                                                                                               |

### Conformity

|                      |                                                             |
|----------------------|-------------------------------------------------------------|
| Mech. capacity       | EN 60947-5-2:2007 + A1:2012<br>IEC 60947-5-2:2007 + A1:2012 |
| Shock resistance     | EN 60947-5-2:2007 + A1:2012<br>IEC 60947-5-2:2007 + A1:2012 |
| Vibration resistance | EN 60947-5-2:2007 + A1:2012<br>IEC 60947-5-2:2007 + A1:2012 |
| Climatic conditions  | EN 60947-5-2:2007 + A1:2012<br>IEC 60947-5-2:2007 + A1:2012 |

### Ambient conditions

|                     |                                |
|---------------------|--------------------------------|
| Ambient temperature | -25 ... 70 °C (-13 ... 158 °F) |
| Storage temperature | -40 ... 85 °C (-40 ... 185 °F) |

### Mechanical specifications

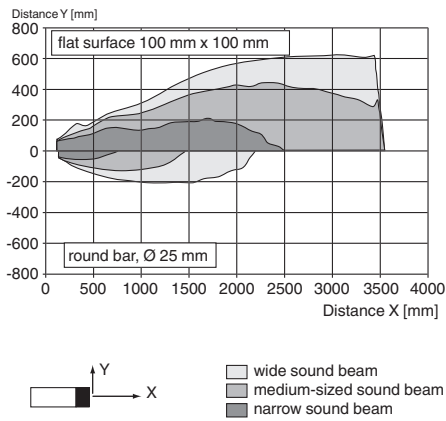
|                      |                          |
|----------------------|--------------------------|
| Degree of protection | IP66 / IP67              |
| Material             |                          |
| Housing              | PC (UL94-V0)             |
| Transducer           | PTFE coated housing: PBT |
| Mass                 | 600 g                    |

### Factory settings

|                       |                    |
|-----------------------|--------------------|
| Beam width            | medium (profile B) |
| Transfer frequency    | 24 h               |
| Measurement frequency | 8 h                |

Characteristic Curve

Characteristic response curve



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