



Wireless ultrasonic sensor WS-UCC2500-F406-B15-B29-8247

- Battery operated
- Transfer of telemetry data via GSM (2G) radio interface
- Bluetooth interface for adjustment of the sensor

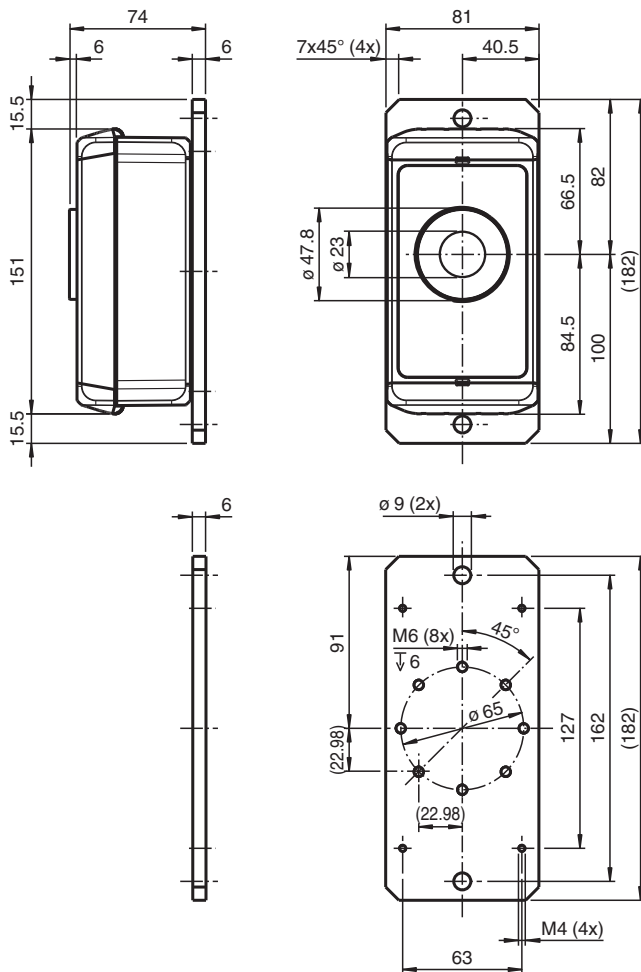
Wireless ultrasonic sensor with GSM (2G) interface



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 at definable time intervals and stored until the next telemetry data transfer. The stored sensor data are transferred in definable time intervals wirelessly to a counterpart on the Internet from where they are available for pure display or further processing.

Dimensions



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Refer to "General Notes Relating to Pepperl+Fuchs Product Information".

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Technical Data

General specifications	
Radio network	GSM
Measurement frequency	5 min ... 24 h
Main sensor	
Detection type	ultrasonic
Sensing range	150 ... 2500 mm
Dead band	0 ... 150 mm
Resolution	10 mm (corresponding to 1 LSB)
Accuracy	± 3 % of full-scale value over the entire temperature range
Integrated sensor technology	
GPS sensor	
Accuracy	< 2.5 m CEP at -130 dbm
Temperature sensor	
Resolution	0.5 °C
Accuracy	± 2 °C
Electrical specifications	
Power supply	high capacity lithium battery 3.6 V , 13000 mAh battery lifetime approx. 5 years under Central European environmental conditions (- 25 °C + 70 °C) 3 measurements/day, 1 geolocation/day with 1 wireless transmission/day with sufficient network coverage.
Interface 1	
Interface type	Bluetooth 5.0 LE
Transmitter radiated power	+ 8 dBm
Frequency range	2402 ... 2480 MHz
Interface 2	
Interface type	GSM
Transmitter radiated power	+ 20 dBm
Frequency range	2G GSM Quadband: 850/900/1800/1900 MHz
Transfer frequency	5 min ... 24 h
Directive conformity	
Electromagnetic compatibility	
Directive 2014/30/EU	EN 301 489-1 V2.2.0:2017 EN 301 489-17 V3.2.0:2017 EN 301 489-19 V2.1.0:2017 EN 301 489-52 V1.1.0:2016
Radio and telecommunication terminal equipment	
Directive 2014/53/EU	EN 301 511 V12.5.1:2017 EN 300 328 V2.1.1:2016 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 IEC 60947-5-2:2007 + A1:2012
Shock resistance	EN 60947-5-2:2007 + A1:2012 IEC 60947-5-2:2007 + A1:2012
Vibration resistance	EN 60947-5-2:2007 + A1:2012 IEC 60947-5-2:2007 + A1:2012
Climatic conditions	EN 60947-5-2:2007 + A1:2012 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	

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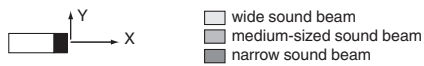
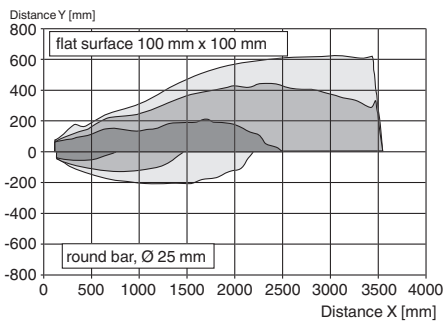
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Technical Data

Housing	PC (UL94-V0)
Transducer	PTFE coated housing: PBT
Mass	600 g
Factory settings	
Beam width	medium
Transfer frequency	24 h
Measurement frequency	8 h

Characteristic Curve

Characteristic response curve



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