



# WAND Sensors

## Thin, embeddable, permanently installed, battery-free ultrasonic sensors

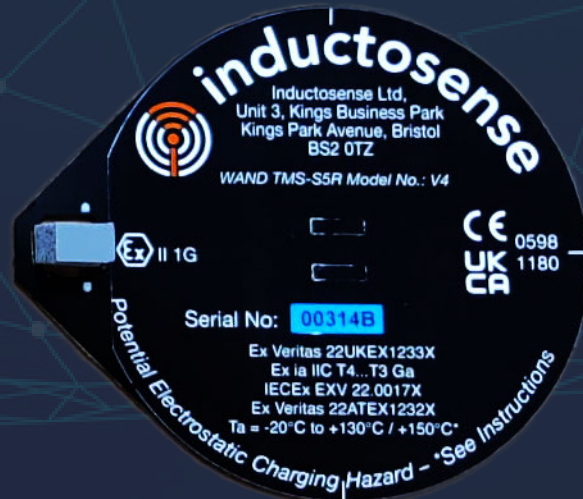
The WAND sensors are designed to be permanently installed on the surface of pipework and vessels to provide reproducible thickness readings free of human-error. Each sensor comes with an RFID for traceability and automated data management.

Inductosense offers the standard TM sensor, where the measurement point is in the centre of the sensor, or alternatively the offset TM sensor, where the measurement point is offset to the side for monitoring in places such as next to welds.

Standard TM Sensor



Offset TM Sensor



ATEX Approved  
Intrinsically Safe



RFID  
Tagged



Simple  
to install



Battery  
Free

# Technical Specifications

The TM Sensor comes in several configurations.

We will recommend a design depending on the particular set of conditions such as temperature, material wall thickness, diameter, and curvature of the material.

Product Code	TMS-B5R (V4)	TMS-S5R (V6)	TMS-B5R-H2
Dimensions	65mm OD, 1mm thick	65mm OD, 1mm thick	65mm OD, 1mm thick
Weight	6.5g	6.5g	6.5g
Operating Frequency	5MHz	5MHz	5MHz
Minimum Thickness*	5mm	3.5mm*	5mm
Maximum Thickness*	Up to 150mm	Up to 50mm	Up to 150mm
Minimum specimen diameter**	90mm	50mm	90mm
Transducer active area	5x12.5mm	4x5mm	5x15mm
Minimum operating temperature	-40°C	-40°C	-40°C
Maximum operating temperature***	130°C	130°C	180°C
Sensor resolution	<0.05mm	<0.05mm	<0.05mm
Certifications	Ex ia IIC T4...T3 Ga (Ta = -40°C to +130°C / +150°C)		Ex ia IIC T4...T3 Ga Ta= -40oC to +120C / +180C

\* Specifications based on flat plate measurements at room temperature, may vary under operating conditions.

\*\* For a straight pipe. The geometry affects the minimum diameter.

\*\*\* Above 90°C, the minimum thickness that can be characterised by the sensor will increase. Please contact us for more details.

\* A sensor with the following specification is available on request:

Minimum thickness of 2m / Maximum thickness of up to 20mm / Maximum operating temperature of up to 110°C

**SN Integrity Pty Ltd**

35 Wisteria Grove -  
Felixstow, SA 5070,  
Australia

✉ [info@snintegrity.com.au](mailto:info@snintegrity.com.au)

☎ 08 7220 6670

🌐 [snintegrity.com.au](http://snintegrity.com.au)

🌐 Follow us on LinkedIn

