

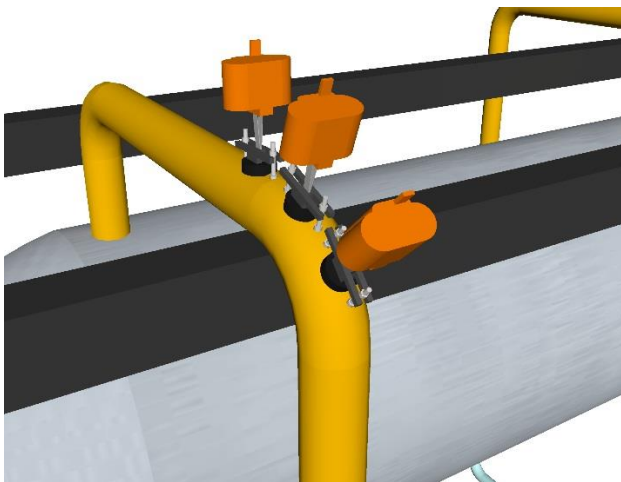


Real Time UT Wall Thickness Monitoring

SMS Ltd provides sand monitoring using best in class, field proven technology. After extensive testing of acoustic monitoring systems, we identified the instrumentation to give our clients the edge they require.

System Overview

The Real -Time UT Wall Thickness Monitoring System is a series of installed wireless UT wall thickness sensors, which form a monitoring array. The system measures absolute wall thickness with no averaging or extrapolation, this allows early identification of corrosion/ erosion activity, areas of high-risk can be monitored continuously.



Features

Continuous monitoring

- Early identification of wall loss at high-risk areas

Wireless communication

- Industry standard wireless integration

Non-intrusive

- Mounted externally via a banding strap

Zone 1

- Intrinsically safe for use in Zone 1 applications

Up to 7 years battery life

- Ensures minimal maintenance required

Benefits

Increased safety

- No need for personnel to inspect high-risk areas

Reduced costs

- No requirement for offshore manual operations

Real-Time Erosion / Corrosion Measurement

- Informs real-time decision making, risk assessment allowing increased reliability and safe operations

Remote Monitoring

- Save on manpower and offshore bed space



Sense



Understand



Perform

Aberdeen / Abu Dhabi / Kuala Lumpur

www.smsoilfield.com

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Specifications

Weight and Dimensions (individual sensor)

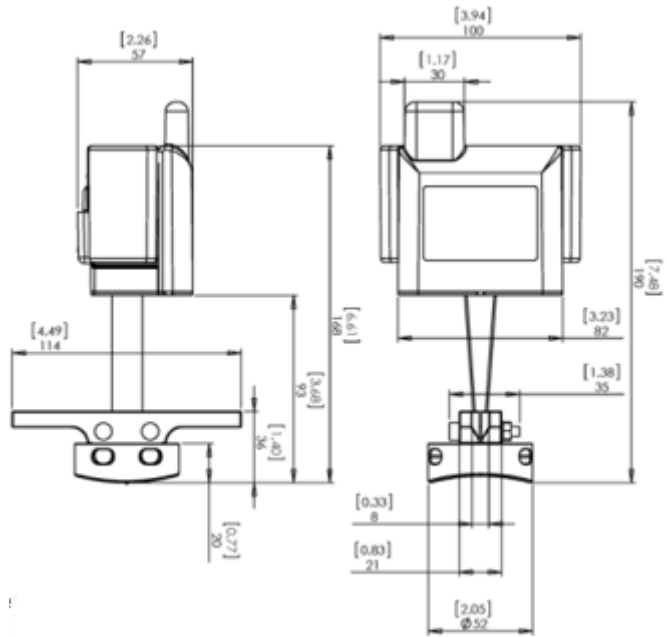
Weight	520g (1.1lbs)
Width	114 mm
Height	190mm
Depth	100mm

Materials

Waveguide	Duplex steel
Sensor foot	Duplex steel
Housing	PC/PBT antistatic
Potting compound	Epoxy
Electronics components	ROHS compliant
Tip seal (optional)	Silicone rubber
Sealant	Bostik Idenden 40-297

Environmental

Pipe Temperature	Up to +150° C (high temperature version available)
IP Rating	IP67



Wireless

Radio	Compliant with EN 300 328 V1.7.1
.....	EEEE 802.15.4 compliant, operating in the 2.4GHz worldwide ISM band
RF Power	8DBM (EU, China, Brazil) 17dBm (US/ Canada)
Network Type	Self-forming, self-managing, self-healing mesh
Range	Short range: Up to 50m (160ft) line of sight between devices
.....	Long Range: Up to 5km (depending on terrain / line of sight)
Maximum Devices	up to 100 sensors per gateway
Maximum Data Hops	8 hops from gateway to furthest sensor

Mounting

Clamped

externally mounted around the pipe, clamp material to suit application (carbon steel, stainless steel etc)

ATEX Intrinsic Safety

Certificate number	Baseefa 14ATEX0053X
Application standards	EN 60079-0: 2012, EN 60079-11: 2012
Markings	II 1 G, Ex ia IIC T4 Ga, Tamb = -50°C to +75°C, IP67
Use only with approved battery types	