



HIGH ACCURACY

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PRODUCT DATASHEET

www.high-accuracy.com

Permasense ET Integrity Monitoring System



CHALLENGE

As an oil and gas producer, the need to drive revenue by producing as much as possible from your existing assets, by maximizing production rates and minimizing downtime, has never been greater. All the while, the assets must be operated safely to avoid serious incidents. You do not currently have an adequate picture of how the asset is coping with the ever-changing corrosion and erosion demands being placed upon it from the inside.

OUR SOLUTION

The ET Integrity Monitoring System provides real-time wall thickness and temperature measurements from online equipment and piping, enabling safer and more profitable operation of producing assets. The ET sensor is specifically designed for quick and easy installation in lower temperature (up to 120 °C (250 °F) for ET210 and 170 °C (338 °F) for ET310) applications. The sensor uses EMAT technology and is capable of measuring the metal wall thickness through external protective coatings. The ET series is therefore ideally suited to upstream applications, where it is important to maintain the integrity of the external protective coating.

HOW IT WORKS

These unique and patented compact ultrasonic sensors continuously measure wall thickness through external protective coatings, and the thickness value is sent via a *WirelessHART*® mesh network to the desks of those engineers who use the data to better-operate their facility or asset.

The ET sensors are affixed via integral magnets and secured using a lightweight strap directly onto equipment in a matter of minutes. ET Sensors will work on any magnetic material, including carbon steels, chrome steels and duplex. The sensors are completely non-intrusive, cable-free and are powered with power module with a service life of up to 10 years.

WHAT IF...

...you could continuously monitor the condition of your production assets, even in difficult to reach or high-risk locations?

...you could have up-to-date data to help drive production rates, inform your maintenance timing and optimize your corrosion/erosion mitigation strategies?

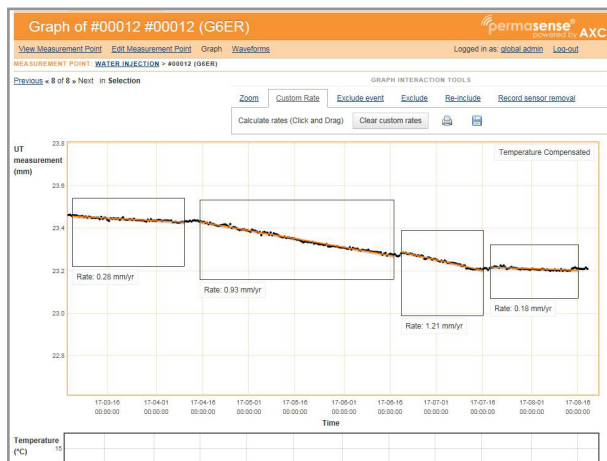


The ET210 Sensor System is particularly valuable for upstream applications such as offshore facilities as well as arctic and sub-arctic environments

For more information visit
www.Emerson.com/Permasense
or contact your local Emerson™ Sales Representative



Permasense ET Sensor System



Safe, quick and easy installation

Completely non-intrusive, no need to remove external coating, compact form factor, no cabling



No data retrieval costs or delays

WirelessHART data delivery into existing IT infrastructure for viewing and analysis



No maintenance

Ultra low power consumption enables power module life of up to 10 years



Best-in-class data visualization and analytics

Data exportable to any other historian

Wide-ranging applications

Onshore or offshore assets: risers, flow lines, piping, vessels, processing equipment

Install anywhere on topside or above ground metalwork where there is risk of internal corrosion or erosion including:

- Areas with known internal damage
- Areas at elevated risk of corrosion or erosion such as elbows
- Areas with limited accessibility

ET sensors can be mixed with WT sensors to cover high temperature locations

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Standard Terms and Conditions of Sale can be found at
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PERMASENSE

Consider it Solved.

Emerson Automation Solutions supports you with innovative technologies and expertise to address your toughest challenges. For more information, visit Emerson.com/Permasense.




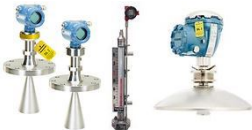










EMERSON



HA HIGH ACCURACY

measurement instruments

Our offering:

 <p>Pressure Measurement</p>	 <p>Level Measurement</p>
 <p>Temperature Measurement</p>	 <p>Flow Measurement</p>
 <p>Marine Measurement & Analytical</p>	 <p>Gas Analysis</p>
 <p>Liquid Analysis</p>	 <p>Flame and Gas Detection</p>
 <p>Tank Gauging</p>	 <p>Wireless Infrastructure</p>
 <p>Acoustic & Discrete</p>	

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