

# Rosemount ET210 and ET310 Wireless Permasense Corrosion Erosion 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 Rosemount™ Wireless Permasense™ ET Corrosion Erosion 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 transmitter series is specifically designed for quick and easy installation in lower temperature (up to 120°C (250°F) for ET210 and 160°C (320°F) for ET310) applications. The transmitter 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 transmitters 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 transmitters are affixed via integral magnets and secured using a lightweight strap directly onto equipment in a matter of minutes. These transmitters will work on any magnetic material, including carbon steels, chrome steels and duplex. The transmitters are completely non-intrusive, cable-free and are powered with power module with a service life of up to 9 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?

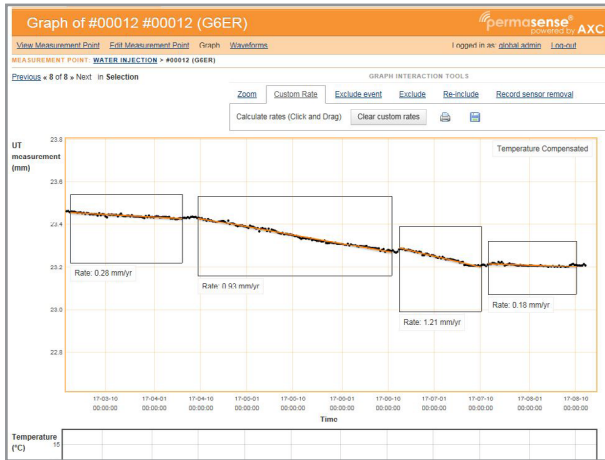


The Rosemount Wireless Permasense ET210 transmitter is particularly valuable for upstream applications such as offshore facilities as well as arctic and sub-arctic environments.

For more information visit  
[www.Emerson.com/Permasense](http://www.Emerson.com/Permasense)  
or contact your local Emerson™ Sales Representative



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## 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 9 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

Rosemount Wireless Permasense ET transmitters can be mixed with Rosemount Wireless Permasense WT transmitters to cover high temperature locations

## Emerson Automation Solutions

Alexandra House, Newton Rd  
RH10 9TT  
Crawley  
United Kingdom

Headquarters +44 20 3002 3672  
Permasense.Sales@Emerson.com or  
RFQ.RMD-RCC@Emerson.com

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