



ROSEMOUNT 3051 WITH LOOP INTEGRITY DIAGNOSTIC

Know when your 4–20 mA signal is being compromised and perform a continuous loop test without leaving the control room.

Uncover hidden electrical loop problems

The electrical loop is critical for communication between the process and control room. Over time, environmental and human stresses on loop infrastructure can put the reliability of the 4–20 mA loop at risk. These issues can easily remain hidden, and since you likely don't have the time or resources to perform regular manual loop checks, you won't know there's an issue until it's too late.

The Rosemount™ 3051 with the Loop Integrity diagnostic performs a continuous loop test to monitor the health of the entire electrical loop. It detects issues that may affect the 4–20 mA signal before they impact process operations or safety.

Diagnostic Log

The built-in diagnostic log tracks events, so you see a history of the device status to diagnose intermittent issues that may occur when not connected to the device.

How it works

- Performs a continuous loop test to monitor for problems in the entire electrical loop, such as unstable power supply, corrosion, water in the housing, or wiring and grounding issues
- Loop integrity baselines the conditions of the electrical loop by drawing a relationship between terminal voltage and output current
- Thresholds can be configured by the user to provide an alert if output current deviates from baseline
- Loop Integrity is safety certified for use in your most critical applications



Rosemount 3051C Pressure Transmitter with Plugged Impulse Line Diagnostics.

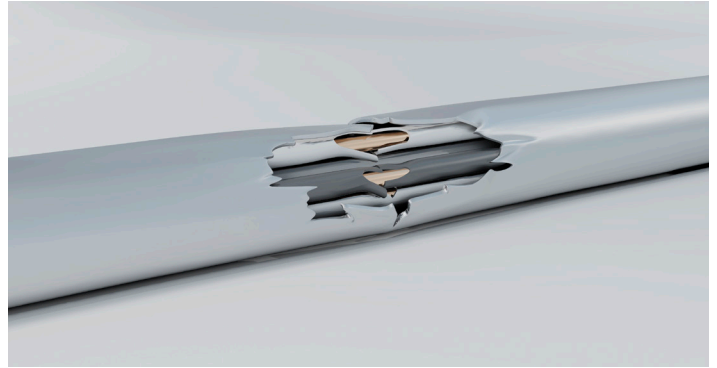
Receive Diagnostic Messages from Multiple Sources:

- Any HART® Host
- 4–20 mA analog system
- AMS Device Configurator
- Bluetooth® app
- Wireless THUM™ Adapter
- Local transmitter display

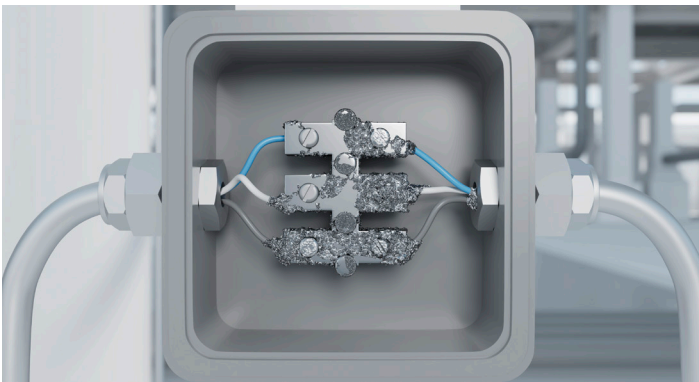
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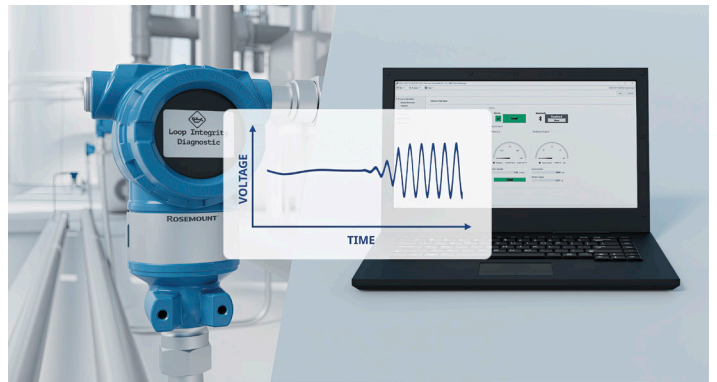
Water in the housing



Wiring and grounding issues



Corrosion



Unstable power supply

Know when there is a loop issue and have confidence that the correct process information is being communicated with Loop Integrity.

Associated Products



3051 for DP Flow



3051 for DP Level



3051S Transmitters

For more information, visit
[Emerson.com/Rosemount3051](https://www.emerson.com/Rosemount3051)

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