

# ROSEMOUNT 3051S PRESSURE TRANSMITTER ADVANCED DIAGNOSTICS

Gain insight into process operation while reducing maintenance costs.

## Uncover Hidden Problems

In addition to simply providing process measurements, most instrumentation today also has some form of internal device diagnostics. However, potential points of failure still exist beyond the transmitter in the electrical loop and the process itself. Left unidentified, these issues can lead to increased maintenance costs, process upsets or shutdowns, or even compromised safety.

## Detect Issue Before They Affect Operations

The Rosemount™ 3051S with Advanced Diagnostics detects issues before they can affect process operations or safety. Paired with the scalable platform of the Rosemount 3051S, this diagnostic package provides valuable insight into process operation that can enable better decision making, increase efficiency, and reduce costs in a variety of applications.

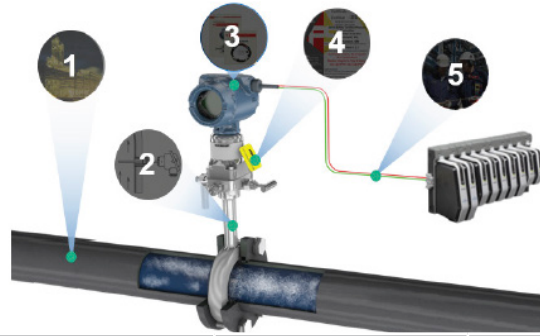
- Continuously monitor for problems throughout the entire electrical loop with the Loop Integrity diagnostic
- Proactively detect abnormal conditions in the process and equipment with the Process Intelligence diagnostic
- Monitor build-up in impulse lines with the Plugged Impulse Line diagnostic
- Get insight into the health of the transmitter with time-stamped status and event logs
- Diagnostics are safety certified for use in the most critical applications



### Receive Diagnostic Messages from Multiple Sources:

- Any HART® Host
- 4-20mA analog system
- Wireless THUM™ Adapter
- Local transmitter display

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Features	1. Process Intelligence	2. Plugged Impulse Line	3. Status and Variable Logs	4. Safety Certified	5. Loop Integrity
<b>Problems Solved</b>	Monitor for: <ul style="list-style-type: none"> <li>• Pump cavitation</li> <li>• Valve cavitation</li> <li>• Distillation column flooding</li> <li>• Entrained air</li> <li>• Furnace flame instability</li> <li>• Process leakage</li> <li>• Agitation loss</li> </ul>	Monitor for: <ul style="list-style-type: none"> <li>• Plugged impulse lines</li> <li>• Other process connection issues like orifice plate process taps, plugged Annubar™ or process leaks</li> </ul>	<ul style="list-style-type: none"> <li>• Simplify troubleshooting</li> <li>• Know which alerts have been active and when</li> </ul>	<ul style="list-style-type: none"> <li>• Reduce Probability of Failure on Demand (PFD) in safety instrumented systems</li> <li>• Yellow tag easily identifies transmitter as part of a safety instrumented function</li> <li>• SIL3 capable for use in a range of safety applications</li> </ul>	Monitor for: <ul style="list-style-type: none"> <li>• Water in the terminal compartment</li> <li>• Corroded terminals</li> <li>• Wiring and grounding issues</li> <li>• Unstable power supply</li> </ul>
<b>How It Works</b>	Rosemount's patented statistical processing technology baselines the process noise and notifies users to changes	Rosemount's patented statistical processing technology baselines the process noise and notifies users to changes	<ul style="list-style-type: none"> <li>• Status log with time stamp capability stores last 10 events in the transmitter</li> <li>• Variable logs with time stamp capability records extreme temperature and pressure events</li> </ul>	Diagnosics are certified by exida to IEC 61508	The transmitter baselines the relationship between terminal voltage and output current and notifies users to changes

## Associated Products



Rosemount 3051S Pressure Transmitters



Rosemount 3051S for DP Flow



Rosemount 3051S for DP Level

For more information, visit [Emerson.com/3051SAdvancedDiagnostics](https://www.emerson.com/3051SAdvancedDiagnostics)

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