

Cost Effective Leak Detection and Repair Monitoring of Fugitive Emissions



Finding hazardous leaks and fugitive emissions in a refinery or chemical plant is a huge but critical job to ensure regulatory compliance, safety, and to prevent costly fines. Each plant can have over 35,000 valves and as many as 200,000 monitoring points. Both refineries and chemical plants have seen the cost of their leak detection and repair (LDAR) programs skyrocket as the number of monitoring points has increased.

Monitoring costs for leak detection and repair programs are escalating. Many companies are not meeting regulatory requirements or are incurring significant violation costs. More importantly, plant safety relies on managing assets effectively.

Most technologies used to identify and detect potential leak paths are either handheld manual or wired solutions. With ever increasing labor costs, an increasing number of points to monitor and the high cost of wiring in hazardous locations, these methods quickly become cost prohibitive and expose the plant to potential violations. At a minimum of \$40/foot for most hazardous areas, the cost of wiring can quickly exceed \$30,000 for a 750 foot run per monitored point. Most plants need to monitor multiple points and these costs become prohibitive. And, in many places periodic inspection is simply not enough but it may be cost prohibitive to run the necessary wiring.

Ensure Regulatory Compliance without the Cost of Wires

Honeywell's OneWireless XYR™ 5000 battery powered industrial wireless solutions enable monitoring of potential leak points and emissions without the cost of wiring or the vulnerability of manual and handheld methods. XYR 5000 brings these measured data points into the control room enabling customers to make knowledgeable real-time decisions with information at a fraction of the cost of handheld or wired solutions. This provides the security of knowing leak points are monitored on a continual basis to ensure regulatory compliance and safety while eliminating costly violations and fines.

Many traditional methods for determining leakage and release from valves and safety relief valves are available, such as rupture discs, pressure, acoustical, and temperature measurement. OneWireless wireless transmitters easily integrate into any of

these methods for safe and reliable monitoring. By detecting a release at these points, one can determine the extent of the release, determine what repair is required, and the overall count released into the atmosphere by knowing the timeframe of the release.

Honeywell wireless solutions provide cost effective access to previously inaccessible information to drive increased productivity, improve safety and enable regulatory compliance that maximizes operational efficiency.

There are a vast number of acceptable solutions to monitor and alert on these applications. Most are associated with high wiring costs in hazardous location areas or manual methods. Honeywell's solution enables real-time leak detection monitoring while also providing the following benefits:

- Maximize the number of points monitored for less than the cost of one wired solution
- Bring all points back to a central location for real time monitoring and action
- Eliminate potential violations and fines
- Increase plant safety



XYR 5000 Wireless Transmitter Installation Savings

Estimated Wiring Costs	Estimated Savings for 500 Feet	Estimated Savings for 1000 Feet	Estimated Savings for 1500 Feet	Estimated Savings for 2000 Feet	Typical rates for standard wiring	Union rates or for X-Proof environments
\$10.00 per foot	Save \$5,000	Save \$10,000	Save \$15,000	Save \$20,000	✓	
\$20.00 per foot	Save \$10,000	Save \$20,000	Save \$30,000	Save \$40,000	✓	
\$30.00 per foot	Save \$15,000	Save \$30,000	Save \$45,000	Save \$60,000	✓	
\$40.00 per foot	Save \$20,000	Save \$40,000	Save \$60,000	Save \$80,000	✓	
\$50.00 per foot	Save \$25,000	Save \$50,000	Save \$75,000	Save \$100,000	✓	
\$60.00 per foot	Save \$30,000	Save \$60,000	Save \$90,000	Save \$120,000		✓
\$70.00 per foot	Save \$35,000	Save \$70,000	Save \$105,000	Save \$140,000		✓
\$80.00 per foot	Save \$40,000	Save \$80,000	Save \$120,000	Save \$160,000		✓
\$90.00 per foot	Save \$45,000	Save \$90,000	Save \$135,000	Save \$180,000		✓
\$100.00 per foot	Save \$50,000	Save \$100,000	Save \$150,000	Save \$200,000		✓

Features

- Communicate up to 100 field devices and 200 process variable with one base radio
- 5 year battery life
- Safe and secure Frequency Hopping Spread Spectrum military style communication (FHSS)
- Seamless serial integration into Honeywell control systems through the Honeywell wireless gateway

More Information

For more information on Honeywell's OneWireless solutions, visit our website www.honeywell.com/ps/wireless, or contact your Honeywell account manager.

Automation & Control Solutions

Process Solutions
 Honeywell
 2500 W. Union Hills Dr.
 Phoenix, AZ 85027
 Tel: +1-602-313-6665 or 877-466-3993
www.honeywell.com/ps

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