



How many wireless networks does it take to optimize your plant?

Honeywell



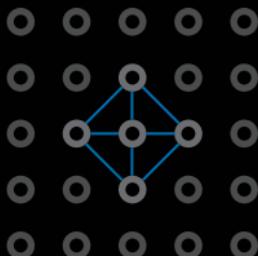
One. Honeywell's OneWireless™ solutions provide the freedom and flexibility to creatively solve difficult challenges while cost effectively expanding the wired network with new applications. With OneWireless, plant personnel and assets benefit from a universal, simple and efficient network that enables increased safety, reliability and efficiency.

Wired networks provide an excellent communication backbone for critical measurements and control loops. As plant protocols and applications increase in scope, expanding the wired network can become time consuming and expensive, and some areas simply cannot be reached with wire.

Traditional Reach: Wired Field Networks

In the past several years, industrial plant technology has evolved to significantly improve operations. While technology such as advanced optimization algorithms and plant asset management can improve plant performance, the limitations of wired networks can slow deployment and hinder return on investment. In most cases, multiple protocols are used based on the end user and application. As plants age, conduit runs and cable trays become overloaded and input/output terminations become scarce. Wired networks struggle to keep up with today's demands and innovations.

- ➊ FOUNDATION Fieldbus device network
- ➋ HART device network
- ➌ Profibus device network
- ➍ Ethernet network
- ➎ Modbus network

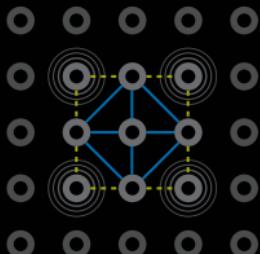




Traditional Reach: Wired Field Networks

Wireless sensors securely extend measurement to remote locations, gathering hard to reach data, increasing safety and improving asset optimization. Enhancing the wired network to include wireless sensors provides a glimpse into the myriad of benefits that can be gained from industrial wireless technology.

Extended Measurement: Wireless Sensors



With over 500 wireless sensor installations, Honeywell's experience and expertise are unrivaled in the industry. Many companies are exploring the features and benefits of wireless sensors. Although wireless sensors provide access to critical data, the benefits represent only a fraction of the potential value that can be realized by implementing a plant-wide wireless network infrastructure.

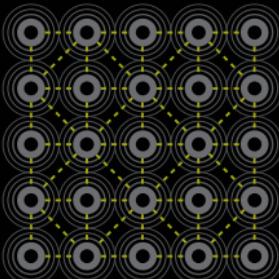
- Tank level monitoring measures levels in real-time, improving utilization and throughput that can show an ROI in three months or less
- Field device measurement obtains real-time pressure, temperature and flow measurements for optimized plant performance with up to 80% installation savings
- Corrosion detection data can be integrated into advanced applications
- Fire and gas detection in remote areas to improve safety
- Safety shower monitoring improves safety and ensures regulatory compliance in a matter of days, shaving weeks off installation time
- Emissions monitoring meets regulations and streamlines environmental reporting
- Difficult to reach areas, such as rotating kilns or furnaces, can be measured with ease using wireless devices
- Equipment health monitoring protects rotating assets and plant operations from unscheduled downtime by up to 70% for more predictable asset life and better inventory management
- Refinery offshore well heads manage the safety and reliability of offshore assets monitoring required over long distances or areas where wiring is prohibitive



Extended Measurement: Wireless Sensors

Plant networks of the future will blend the wired and wireless networks into a seamless infrastructure, matching the ideal medium to the task at hand. Only Honeywell has the technology and expertise to deliver on this vision. OneWireless is a universal, simple and efficient solution to extend and enhance the plant network. Incorporating a high-speed wireless backbone, WiFi connectivity and a robust sensor radio network, it stands alone as the perfect complement to a wired plant network.

Limitless Potential: The Plant-wide OneWireless Network



While wireless sensor networks have the ability to gather more data than a wired network, a plant-wide wireless network can improve overall safety, performance and efficiency. Honeywell's OneWireless solutions extend access to critical process information beyond the control room, allowing personnel to capture and share data from systems and field devices across the plant. More real-time information enables more accurate and timely decision-making, and significantly enhances operational performance. Another benefit of Honeywell's OneWireless network is its ability to extend IP communication over wireless links and support both WiFi and sensors in the same efficient bandwidth.

- ➊ Mobile operator helps a constrained workforce make better decisions with real-time information and improves operator effectiveness by 30%
- ➋ Asset tracking helps locate essential assets to reduce inventory shrinkage by 40%
- ➌ Automated field operator rounds capture, track and integrate real-time field data with data from other assets for more reliable asset health management for a six-month payback
- ➍ Mobile communications improve safety and efficiency by allowing faster communication with more employees in various locations and emergency responders through a robust and available network
- ➎ Procedural Operations integrates operational procedures with mobile rounds and real-time contextual data reducing unreliable manual processes
- ➏ Extend the process control network to reduce installation costs by 65% and reduce schedule time by several months
- ➐ Video monitoring increases the scope of video surveillance and process inputs to areas not previously reachable
- ➑ Remote perimeter security helps protect personnel and the plant



Limitless Potential: The Plant-wide OneWireless Network

Proven Results

With over 500 global installations, Honeywell's OneWireless solutions have helped end-users meet specific challenges in addition to avoiding wiring costs. As companies expand and extend their wireless network, they experience the benefits from an efficient and reliable wireless infrastructure.

Examples include:

- After implementing Honeywell wireless solutions, a steel recycling mill increased production by 15 percent through a furnace upgrade and reduced maintenance requirements compared to wired alternative.

- A specialty chemicals company installed Honeywell's wireless transmitters at less than one-third of the estimated costs of the project to improve reporting, meet regulatory requirements and enable real-time smoke detection.
- A pharmaceutical company implemented Honeywell's wireless solution to improve employee safety while reducing installation, operational and maintenance costs.

Honeywell Advantage

Honeywell offers more than just innovative technology. Our expertise, applications, leadership and services are beyond compare. With experience delivering robust wireless solutions to diverse industries, our combined shipments equal millions of wireless sensors. This broad and deep background provides us with expertise and best practices to meet our customers' needs for security, reliability and efficiency with assessment, design and implementation services.

For More Information

To learn more about Honeywell's wireless solutions, visit www.honeywell.com/ps/wireless or contact your Honeywell account manager.

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