Cypress Envirosystems Offers Compelling Reasons to Deploy Wireless

By Wil Chin

Summary

Deploying wireless solutions is likely the last thing on your mind. However, application-specific wireless solutions available from innovators such as Cypress Envirosystems are possibly the best move you can make in today's challenging environment. Wireless by itself does not provide any value. But when used to connect low cost solutions that can reduce energy usage or alert workforce of potential equipment failures, wireless-enabled solutions can result in fast ROI, making them very appropriate in today's challenging environment. In a recent interview, Cypress Envirosystems briefed ARC on its innovative new products. These include the *Wireless Steam Trap Monitor*, *Wireless Freezer Monitor*, *Wireless UPS Battery Monitor*, and *Wireless Pneumatic Thermostat*. All can provide compelling value and are available today.

> Despite the current practice of spending cuts, manufacturers must continue to invest in automation to avoid economic calamity. With limited capital funds, ROI is an appropriate benchmark to identify the best projects for investment. Fortunately, innovative companies such as Cypress Envirosystems have taken wireless technology and applied it to practical applications which can be implemented quickly to help save energy and improve equipment availability.

Not Just Technology, But Real Value

Cypress Envirosystems (CE), a subsidiary of Cypress Semiconductor Corp., presented the company's compelling end user wireless solutions at the ARC Orlando Forum. CE specializes in non-invasive, wireless-enabled measurement solutions that can be installed at a fraction of the cost of traditional solutions. Its products, such as the Wireless Gauge Reader and the Wireless Steam Trap Monitor can provide pay back in less than 12 months. All CE products adhere to CE's design philosophy: "install in minutes, no process disruption, no leak check, no wiring, no retraining of staff, no new enterprise software, and payback of 12 months."

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Solutions for Energy Management

CE recently introduced the Wireless Gauge Reader (WGR), Wireless Transducer Reader (WTR), and Wireless Steam Trap Monitor (WSTM). These products are suitable for virtually every industry, including process, hybrid, and discrete. They are ideal for end users looking to reduce energy cost.

The WGR is an elegantly simple device that clips on to the front face of an existing pressure or temperature dial gauge to capture and transmit the readings to a software application for monitoring and/or analysis.

**Cypress Envirosystems
Wireless Gauge Reader**

Other CE applications take measurements enabled by the use of the WTR to help operators run equipment more efficiently. This includes compressed dry air systems, where the measurements allows rapid energy auditing of steam and chilled water flow to determine major contributors of waste.

Of these three products, the WSTM possibly provides the most readily identifiable value. Steam traps can fail randomly at any time. This wastes costly steam as it is released into the atmosphere, perhaps for days, before becoming known. WSTM identifies the failure as it happens, alerting workers for quick resolution that can save hundreds of dollars an hour.

Solutions for Equipment and Building Asset Management

CE's Wireless Freezer Monitor (WFM) and Wireless Battery Monitor (WBM) solutions capture application-specific data from freezers or batteries, respectively, and use software to analyze the data to determine equipment health and identify potential faults that can affect efficiency. By installing non-invasive sensors, such as current, voltage, resistance, and temperature, data can be transmitted wirelessly to a CE software application, which sends an alert when a problem arises.

CE's recently introduced Wireless Pneumatic Thermostat (WPT) enables building managers to reduce HVAC costs by replacing existing pneumatic thermostats in older buildings with a digital WPT that allows wireless bidirectional communication. The wireless connectivity and design of the pneumatic connections allows retrofits in minutes, and typically costs 20 percent of the traditional cost ($2,500 or more per zone) for conventional digital control thermostats. Once installed, WPT automatically connects to

the network and enables remote temperature sensing and control of set-points, programmable zone control, and night setback, with automatic self-calibration. The available BACnet communications seamlessly integrate with existing automation systems, enabling use with utility Demand Response programs.

Conclusion

Despite the company's technology roots, Cypress Envirosystems has clearly worked diligently to identify wireless solutions that address real world problems with a very high return. Ease of deployment, combined with appropriate price points, mean the solutions, will find increasing opportunities as organizations scramble to survive during the economic slowdown.

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