Phoenix Contact Fieldbus Diagnostics Module

If you have space for a deck of cards in FOUNDATION Fieldbus junction box, then Phoenix Contact has the Fieldbus Diagnostics Module (FDM) to keep constant watch of your installation. The FB DIAG/FF/LI product offers all standard physical layer diagnostics and supports NAMUR NE 107. No software license required, and installation is easy with just a threewire connection. Your host system identifies the module at power up. Learn more.

Long Beach, California, to Host 2017 General Assembly

Annual gathering of automation industry professionals is attended by leading FOUNDATION Fieldbus, HART, WirelessHART and FDI suppliers, end users and other participants from around the world. Read more.

FieldComm Group Enhances Plant of the Year Award

The award winner will be able to attend the FieldComm Group's annual General Assembly and End User Council meeting at no charge, among a series of other benefits. Read more.

Participants Sought for Americas Marketing Group

FieldComm Group's marketing activities are part of a broad global initiative in support of the organization's open, transformative digital automation technologies. Read more.

Successful Webinar Series Continues in 2017

These informative presentations describe the digital transformation of industrial control strategies, and provide insights from experts on various aspects of today's evolving automation market. Read more.

Latest Registered FOUNDATION Fieldbus and HART Products

The number of FOUNDATION Fieldbus and HART products registered by the FieldComm Group continues to grow. Read more.
Automation Suppliers Benefit From FDI ‘PlugFests’

Events are intended for members of FieldComm and PROFIBUS/PROFINET International seeking to improve the interoperability of FDI Device Packages and FDI Host Systems being developed and released onto the market. Read more.

Sign Up for WirelessHART Bootcamp Today!

Innovative program will enable enrollees to gain an understanding of topics such as mesh networking basics, WirelessHART system design, WirelessHART and wired systems, network security, and integrating WirelessHART into the organization. Read more.

Application Snapshot: Optimizing Leak Detection

Two examples illustrate how a plant can take advantage of wireless technology to gain business benefits — including enhanced safety and regulatory compliance — in applications beyond the process itself. Read more.

New product news you might be interested in:

- Emerson Introduces Industry’s First WirelessHART Power Meter
- Endress+Hauser: Fit for the Future with Proline 300/500
- FINT Offers Affordable Way to Integrate HART Transmitters into FOUNDATION Network
- Moore Industries Delivers Next Generation of Smart HART Dual Input Temperature Transmitters
- Phoenix Contact Introduces Zone 1 FOUNDATION Fieldbus Barrier with Added isolation
- ProComSol Offers Android HART Communicator
- Meggit, Inc. Wilcoxon Research Announces HART PCH420V Field-configurable Vibration Sensor

HART/Fieldbus Solutions – Bring out the real potential of smart field devices!

HART/Fieldbus Solutions offered by Azbil Corporation provide field devices compliant with HART Communication and FOUNDATION Fieldbus protocols, systems and sophisticated services, and contribute to safe plant operation and productivity. Learn more.
Upcoming Events

**North America**

**Smart Industry Conference**
Chicago, Illinois USA
September 2017

» More Information

**Europe, Middle East, Africa (EMEA)**

Hannover Messe Exhibition
Hannover, Germany
April 2017

» More Information

Africa Automation Fair
Johannesburg, South Africa
June 2017

» More Information

FDI PlugFest
Berlin, Germany
July 2017

» More Information

SPS IPC Drives
Nuremberg, Germany
November 2017

» More Information

**Asia Pacific**

End User Seminar
Jakarta, Indonesia
May 2017

» More Information

End User Seminar
Western Japan
July 2017

» More Information

Oil & Gas Asia Exhibition
Kuala Lumpur, Malaysia
July 2017

» More Information

End User Seminar
Eastern Malaysia
August 2017

» More Information

Automation Expo 2017
Mumbai, India
August 2017

» More Information

Miconex 2017
Shanghai, China
September 2017

» More Information

End User Seminar
Bangkok, Thailand
October 2017

» More Information

JEMIMA M&C 2017
Tokyo, Japan
November 2017

» More Information

End User Seminar
Seoul, Korea
December 2017

» More Information
FieldComm Group has announced that its 2017 General Assembly will be held in Long Beach, California, October 16-20. This annual gathering of automation industry professionals is open to FieldComm Group members and non-members, and is attended by leading FOUNDATION Fieldbus, HART, WirelessHART and FDI suppliers, end users and other participants from around the world.

The General Assembly will offer an overview of developments in digital transformation throughout industrial automation. This includes updates by leading experts on the latest technology advancements, as well as presentations by major end users who have installed FOUNDATION fieldbus- and HART-based solutions in their plant operations.

FieldComm Group President and CEO Ted Masters said, “Our organization is dedicated to a unified vision for smarter industry, with technologies providing a connected framework using intelligent field devices to reduce waste, improve safety and increase operational efficiency. Each year, our General Assembly attracts a wide spectrum of the automation community within global manufacturing. We strongly encourage all end users of FOUNDATION Fieldbus and HART technologies, and those looking to become users, to actively participate in this event.”

For more details and registration information, please visit the Events Page on the FieldComm Group website or call 512-792-2300.
FieldComm Group Enhances Plant of the Year Award

By FieldComm Group
Apr 05, 2017

FieldComm Groups has unveiled a number of enhancements to its globally recognized Plant of the Year Award. This honor is presented to plants that have demonstrated significant savings and benefits by making a digital transformation utilizing the information available in their smart measuring devices.

The latest enhancements increase the value to end user organizations receiving the Plant of the Year Award. For example, recipients will now have their FieldComm Group membership fee waived for three years. Other finalists will receive free membership for one year. The award winner will also be able to attend the FieldComm Group’s annual General Assembly and End User Council meeting at no charge (see related article in this issue). All award finalists will receive a FieldComm Group Innovative Achievement Award, along with a plaque and recognition in a feature article.

FieldComm Group is currently seeking nominees for its 2017 Plant of the Year Award. Open to users of any of the organization’s technologies, including FOUNDATION Fieldbus, HART, HART-IP, WirelessHART and FDI, or a combination of technologies, the supplier-independent award recognizes people, companies and plant sites around the world using the full capabilities of digital automation in real-time applications to improve operations, lower costs and increase plant availability.

FieldComm Group President and CEO Ted Masters commented, “Selection of the Plant of the Year is based on a plant’s use of our field communication and integration technologies – not on the size or location of the installation. We are seeking a plant that has taken the capabilities of compliant devices beyond configuration and calibration.

It can also be a plant that is using real-time device diagnostics and process information integrated with control, information, asset management, safety systems or any other system.”

Previous recipients of the Plant of the Year Award include Nucor Steel and Dow Chemical (USA), Monsanto (USA), Shell (Canada), MOL (Hungary), Mitsubishi Chemical (Japan), PDVSA (Venezuela), Statoil (Norway), Sasol (South Africa), Clariant (Germany), and DuPont (USA).
Nominations for the 2017 award will be accepted until May 31, 2017. Nomination forms and program details are available at go.fieldcommgroup.org/award. Nominations should include a brief overview description of how the plant uses FieldComm Group technologies to improve operations, lower costs, better manage plant assets, or support plant information needs.

Background information and supporting materials are welcome, but not required with the nomination. All nominations are acknowledged via email. Telephone interviews are conducted with nominees selected for consideration. The FieldComm Group Plant of the Year Award Selection Committee is solely responsible for determining award recipients.

*For more information, please visit the Plant of the Year Award Page on the FieldComm Group website.*
FieldComm Group is seeking volunteers from member companies to participate in its Americas region marketing activities, which are part of a broad global initiative in support of the organization’s open, transformative digital automation technologies.

Talon Petty, who currently serves as Marketing & Business Development Manager, has also been appointed FieldComm Group’s Regional Director—Americas. He will oversee efforts intended to convey technology strategies in North and South America. “Marketing plays a crucial role in promoting the value of HART, WirelessHART, HART-IP, FOUNDATION Fieldbus and FDI for process industry operations,” Petty said. “Our message is focused on the growth of digital transformation throughout the industrial world, and how our technologies fit in the context of enabling the evolution to IIoT and Industrie 4.0.”

Petty added, “FieldComm Group’s marketing outlook is clear and exciting, and upon the initial formation of this committee we will be presenting how our technology solutions provide operational and business benefits to end users.”
FieldComm Group has maintained a steady pace of marketing activity. Recent milestones and upcoming highlights include:

- Development of a new strategic vision whitepaper titled, "Digital Transformation in the Age of IIoT"
- Commercial launch of FDI technology along with "PlugFests" to be held in conjunction with upcoming Working Group meetings (see related article in this issue)
- Plans for FieldComm Day, a series of one-day seminars staged worldwide to highlight FOUNDATION Fieldbus, HART and FDI technologies

Coinciding with formation of the Americas Marketing committee, FieldComm Group hopes to reengage the region’s End User Council to have direct participation in, and involvement with regional activities.

To inquire about participation in the Americas Marketing Committee, please contact Talon Petty by email at marketing@fieldcommgroup.org.
Successful Webinar Series Continues in 2017

By FieldComm Group
Apr 05, 2017

FieldComm Group, in association with Control magazine, will once again present a series of technology webinars in 2017. These informative presentations describe the digital transformation of industrial control strategies, and provide insights from experts on various aspects of today's evolving automation market.

The 2017 webinar schedule builds upon the success of the 2016 series. Five webinars were conducted last year with more 1,000 total views. The topics included:

- **A formula for IIoT Success: Connect + Integrate = Value** (Speakers: Joel Holes, Monsanto; Ted Masters, FieldComm Group; and Keith Larson, Control magazine)
- **Smart Choices Start with Smart Devices – Is Anyone Listening?** (Speakers: John Rezabek, Ashland Chemicals; and Jim Montague, Control magazine)
- **FF - Foundation for a Digital Transformation** (Speakers: Ed Bullerdiek, Marathon Oil; and Paul Studebaker, Control magazine)
- **WirelessHART – Interoperability and Integration** (Speakers: Wally Baker, Emerson; Garry Cusick, Pepperl+Fuchs; Steffen Ochsenreither, Endress+Hauser; and David Burrell, Phoenix Contact)
- **HART-IP – Seamless Integration of HART into Enterprise for IIoT** (Speakers: Eric Rotvold and Wally Baker, Emerson; Garrett Schmidt, Phoenix Contact; Tina Todd, Moore Industries; Mike Cushing, Honeywell; and Chris Coen, OSIsoft)

FieldComm Group’s 2017 webinar series will address the following subjects:

*Cyber Security and the IIoT – How FDI and WirelessHART Keeps You Secure* – March-April (This webinar will provide an overview of how FDI and WirelessHART contribute to IIoT initiatives, as well as the built-in features that address cyber security requirements.)

*Five Critical Steps for Successful Digital Transformation* – May-June (This webinar will describe real world considerations for transformation from analog to digital control technology, and from reactive to predictive operations and maintenance.)
Digital Integration of Plants & Process by FDI – July-August (This webinar will explore the real benefits of FDI in simplifying and standardizing plant floor data into enterprise information, and what’s needed to maximize the value.)

Value of a Fully Integrated System from Device to Enterprise – September-October (This webinar will include experts discussing the value of a fully integrated system, along with a roadmap to deliver device data throughout the enterprise.)

Simplified Segment Design – Getting the Most Out of FOUNDATION Fieldbus Installations – December (This webinar will describe how FOUNDATION Fieldbus segment design and troubleshooting has been significantly improved with the help of new tools, applications and products.)

All webinars are recorded and offered online for on-demand, 24/7 viewing.

FieldComm Group’s 2017 webinar series is made possible by the support of the following sponsors:

Platinum Sponsors:
- Meggitt
- Moore Industries
- Phoenix Contact

Gold & DSP Sponsors:
- Azbil
- Emerson
- Endress+Hauser
- FCI
- FINT
- Microcyber
- Yokogawa

Silver & Bronze Sponsors:
- ABB
- ProComSol

Education Sponsors:
- Trine
- Lee College

To register for future webinars, receive email notifications of upcoming topics, or suggest future topics, please visit the Webinar Page on the FieldComm Group website.
Latest Registered FOUNDATION Fieldbus and HART Products

Apr 05, 2017

The number of FOUNDATION Fieldbus and HART products registered by the FieldComm Group continues to grow. FieldComm Group is one of the only automation industry organizations with a registration program requiring mandatory testing of critical elements of its technologies. The effort encompasses host systems and field devices and physical layer components such as power supplies and device couplers from all segments of the automation market.

The table lists the most recently registered products by manufacturer, type, and model/host name.

<table>
<thead>
<tr>
<th>Protocol</th>
<th>Manufacturer</th>
<th>Type</th>
<th>Model / Device Name</th>
</tr>
</thead>
<tbody>
<tr>
<td>HART</td>
<td>ABB Ltd</td>
<td>Analytical Water Transmitter</td>
<td>AWT210</td>
</tr>
<tr>
<td>HART</td>
<td>Draeger Safety AG &amp; Co. KGaA</td>
<td>Gas Detector</td>
<td>PIR 7x00</td>
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<tr>
<td>FOUNDATION Fieldbus</td>
<td>Eaton Electric Ltd.</td>
<td>MTL IS Megablock</td>
<td>F2xx-IS</td>
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<tr>
<td>FOUNDATION Fieldbus</td>
<td>Endress + Hauser</td>
<td>4-wire Coriolis Flowmeter</td>
<td>Promass 300/500</td>
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<tr>
<td>FOUNDATION</td>
<td>Endress + Hauser</td>
<td>4-wire Magnetic</td>
<td>Promag 300/500</td>
</tr>
<tr>
<td>Fieldbus</td>
<td>Manufacturer</td>
<td>Type</td>
<td>Model / Device Name</td>
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<tr>
<td>HART</td>
<td>Endress+Hauser</td>
<td>Flowmeter</td>
<td>Promag 400</td>
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<tr>
<td>HART</td>
<td>Krohne Messtechnik GmbH</td>
<td>Coriolis Mass Flowmeter</td>
<td>MFC400S</td>
</tr>
<tr>
<td>HART</td>
<td>Krohne Messtechnik GmbH</td>
<td>Level Transmitter</td>
<td>OPTIWave x400/x500</td>
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<tr>
<td>HART</td>
<td>Magnetrol International</td>
<td>Level Transmitter</td>
<td>Model R86 Pulsar® Pulse Burst Radar Level Transmitter</td>
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<tr>
<td>WirelessHART</td>
<td>Microcyber Corporation</td>
<td>Wireless Development Tool</td>
<td>M1100S DEV-WH-X</td>
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<td>HART</td>
<td>Private JSC Manometr-Kharkiv</td>
<td>Gas Detector</td>
<td>Safir</td>
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<td>HART</td>
<td>Texas Instruments</td>
<td>Simulated Sensor</td>
<td>DAC8730</td>
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<tr>
<td>HART</td>
<td>Val Controls A/S</td>
<td>Intelligent Diagnostic Controller</td>
<td>IDC24</td>
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<tr>
<td>HART</td>
<td>Young Tech Co. Ltd.</td>
<td>Level Transmitter</td>
<td>SPTM</td>
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**Updated Registered Devices**

<table>
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<th>Type</th>
<th>Model / Device Name</th>
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<tr>
<td>HART</td>
<td>Agar Corporation</td>
<td>Interface Detector</td>
<td>ID200</td>
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<tr>
<td>HART</td>
<td>Emerson Process Management - Micro Motion Inc.</td>
<td>Coriolis Transmitter</td>
<td>5700 Configurable I/O</td>
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<tr>
<td>HART</td>
<td>Honeywell International</td>
<td>Pressure Transmitter</td>
<td>ST 700</td>
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<tr>
<td>FOUNDATION</td>
<td>Pepperl+Fuchs GmbH</td>
<td>Temperature Multiplexer</td>
<td>F2D0-TI-Ex8.FF</td>
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<tr>
<td>Fieldbus</td>
<td></td>
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<td></td>
</tr>
<tr>
<td>HART</td>
<td>Schneider Electric USA, Inc.</td>
<td>Pressure Transmitter</td>
<td>I/A Pressure S</td>
</tr>
<tr>
<td>FOUNDATION</td>
<td>VEGA Grieshaber KG</td>
<td>Guided Microwave Level Transmitter</td>
<td>Vegaflex 80 Series</td>
</tr>
<tr>
<td>Fieldbus</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>HART</td>
<td>VEGA-Grieshaber KG</td>
<td>Pressure Transmitter</td>
<td>VEGABAR 80 series</td>
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<tr>
<td>HART</td>
<td>VEGA-Grieshaber KG</td>
<td>Level Transmitter</td>
<td>Vegaflex 80</td>
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</table>

**Updated Electronic Device Description (EDD)**
<table>
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<th>Model / Device Name</th>
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<tr>
<td>FOUNDATION Fieldbus</td>
<td>Thermo Fisher Scientific</td>
<td>Level and Density Transmitter</td>
<td>MS2011</td>
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<tr>
<td>FOUNDATION Fieldbus</td>
<td>Yokogawa Electric Corporation</td>
<td>Coriolis Mass Flowmeter</td>
<td>ROTAMASS TI R0</td>
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</tbody>
</table>
FieldComm Group and PROFIBUS/PROFINET International are cooperating during 2017 to stage a series “PlugFests” to validate the interoperability promise of Field Device Integration (FDI) technology. The events are intended for members of both organizations seeking to improve the interoperability of FDI Device Packages and FDI Host Systems being developed and released onto the market.

Managed by FieldComm Group staff and volunteers, PlugFests allow teams of development engineers working on FDI-compliant host systems and field instruments to collaborate on a confidential basis to verify the interoperability of their products with offerings from different companies. The events normally take place in conjunction with regular FieldComm Group Working Group meetings.

The first FDI PlugFest was held October 20-21, 2016, in Rotterdam, The Netherlands. A second event was staged in Hong Kong, China, on March 30-31, 2017. Upcoming sites include Berlin, Germany, and Long Beach, California. Companies must be a member of FieldComm Group or PROFIBUS/PROFINET International to take part in the free-of-charge testing.
According to FieldComm Group’s Director of Marketing, Paul Sereiko, the FDI PlugFests are intended to test field devices, controllers, systems, and engineering/diagnostic tools both with pre-release devices and instruments just introduced to the market. “FDI holds the key to optimizing interoperability across a wide spectrum of industrial automation,” Sereiko said. “The aim of PlugFest goes beyond solving developer problems, and is an improvement over independent testing. Suppliers get to see first-hand how their hosts and devices work together with comparable products from other vendors. For FieldComm Group, these events provide valuable feedback that can be used for continuous enhancement of technical specifications, tools and product registration processes. The ultimate beneficiaries, of course, will be process industry end users.”

Sereiko added, “By conducting PlugFests globally, FieldComm Group will engage with automation equipment manufacturers in various regions of the world to help ensure a success commercial launch of FDI.”

FDI technology originated as a way to dramatically simplify software installation, configuration, maintenance, and integration of field instruments with host systems. Modern field devices often include a device information file such as an Electronic Device Description (EDD) or Device Type Manager™ (DTM™) that provides software access to the features and functions of the device, one or more user interface plug-ins that integrate with host system software to enhance usability of the field device with the host, numerous user manuals, installation instructions and data sheets.

Before FDI, multiple integration products had to be implemented and maintained by the device manufacturers, supportive documents had to be searched and collected by the users, and several integration standards had to be supported by the system vendors.

FDI brings standardization to the packaging and distribution of all the software and tools necessary to integrate a device with a host system regardless of protocol. All registered FDI devices will have one single FDI Device Package consisting of all the host needs to optimize the capabilities of each device.

All FDI PlugFest participants are required to sign a confidentiality agreement prior to the event.
Sign Up for WirelessHART Bootcamp Today!

By FieldComm Group
Apr 05, 2017

Are you looking to increase your knowledge of WirelessHART technology? If so, you should sign up for WirelessHART Bootcamp, a multi-week online educational program led by FieldComm Group staff and associates. This innovative program will enable enrollees to gain an understanding of topics such as mesh networking basics, WirelessHART system design, WirelessHART and wired systems, network security, and integrating WirelessHART into the organization.

WirelessHART Bootcamp will consist of six one-hour sessions with specific learning objectives and evaluations. Guest speakers will take part in some sessions to provide relevant expertise.

Slated to begin in the second quarter of this year, the bootcamp curriculum will be divided into the following sections:

1. **Understanding industrial wireless communication networks – mesh networking**

   Ad Hoc mesh networking with WirelessHART is the best solution for industrial process automation facilities. Participants will learn:

   - Differences between wired and wireless systems
   - Network topologies
   - Interference
   - Engineered vs. ad-hoc networks
   - Techniques for managing wireless spectrum
   - Mesh networking

2. **System design tradeoffs – battery life, update rates and network density**
A thorough understanding of the needs of the application will assure higher reliability and lower maintenance costs. Participants will learn:

- Relationship between PV update rates and battery life
- Impact of network design on battery life
- Balancing the real “need” for data with physical realities

3. *WirelessHART* adapters – adding wireless to existing wired systems

Participants will learn:

- How to easily digitize field instrument data with *WirelessHART* adapters
- Function of a *WirelessHART* adapter
- How are adapters used
- Purchasing considerations for *WirelessHART* adapters

4. Keeping *WirelessHART* networks secure

Participants will learn:

- Major points in the *WirelessHART* security whitepaper
- Radio security (TDMA)
- Password management
- Encrypted data

5. Management of Change Part 1 – When is it okay to use *WirelessHART*?

Participants will learn:
• Applications that can easily be implemented with WirelessHART given organizational risk tolerance considerations
• Techniques for determining which applications are suited for wireless
• Incorporating WirelessHART system vetting in the MOC process

6. Management of Change 2 – maintenance and integration of WirelessHART in operations

Participants will learn:

• Monitoring and maintaining techniques for installed networks
• Special considerations for alerts and alarms from WirelessHART-connected devices in the context of the control loop
• How to use WirelessHART system diagnostic data effectively
• Assigning responsibilities for network management, battery swaps, etc.
• Alerting and alarming with WirelessHART networks

To register for online instruction, or for more information, please visit the WirelessHART Bootcamp Page on the FieldComm Group website.
Leak detection at large chemical sites can be both difficult and expensive. At one Belgian plant, operators were making twice-daily inspection rounds using portable leak detectors — but new and stricter government regulations required continuous monitoring instead. So, plant management decided to implement an online leak-detection system.

In 2013, after research on suppliers and technology, the plant installed a system that uses hydrocarbon fast-fuel sensors and sensor cables, and wireless discrete transmitters. An IEC-standard WirelessHART field network communicates leakage data from the remote transmitters to the plant control system.

The leak detection project saved around 60% compared to a conventional wired approach. Moreover, the system took only one day to commission. Besides ensuring compliance with regulations, the installation has enabled the plant to expand the operators’ view and has enhanced its existing leak-detection practices, helping to improve site safety.

**Challenges for Plant Operators**

The primary drivers for implementing real-time leak detection were the flammable nature of the product itself and the desire to reduce compliance issues, increase employee safety and provide constant monitoring of the plant’s condition. Specific challenges included:

- Difficulty in detecting/monitoring hydrocarbon leaks around tanks, valves and pipe flanges
- Absence of installed instruments on tanks to detect abnormal changes in level due to leaks
- Fluctuation of tank level with changes in process demand
- Lack of ready-to-use options to detect leaks at valves and flanges

The plant’s management wanted to avoid the issues posed by traditional wired online monitoring (e.g., requirements for extensive cabling), together with the associated input/output, signal converters and installation costs. So, an evaluation team began a search to select the right technology. It reviewed different solutions and then tested a number of potentially viable available options:
• Gas detection using a catalytic probe
• Optical monitoring system (spectral analysis)
• Analyzer for lower explosion limit (LEL) detection
• *Wireless*HART hydrocarbon leak detection
• *Wireless*HART fast fuel sensors for leak detection

**Figure 1**

The team found most promising an approach that integrated sensors that detect liquid hydrocarbons with *Wireless*HART communications technology. It put that option through further laboratory trials with simulated leaks. Successful test results prompted a decision to implement that approach at the plant.

The leak detection system uses eleven wireless discrete transmitters in combination with fast fuel sensors and sensor cables. When one of the sensors detects xylene or benzene, the associated transmitter wirelessly transmits an alarm signal to a smart wireless gateway for relay to the control room where operators monitor and record the status for accurate incident reporting and time stamping in the host control system. The discrete input/output devices are part of IEC-standard *Wireless*HART field networks (See Fig. 1).
The sensor cables are attached to the concrete bases surrounding tanks to detect leaks from the tank wall. They also are laid underneath connecting piping and draped around the tank flanges and manholes as well as valves. The fast fuel sensors detect hydrocarbons in sump wells and pump skids. Leaking xylene or benzene upon touching the sensor cable or sensor completes a circuit. This sends a discrete input to the input/output device that transmits it wirelessly to a gateway that relays data to the control room (See Fig. 2).

Key Performance Improvements

The plant team found that wireless technology provides a reliable, affordable way to gather information from hydrocarbon sensors that continuously monitor storage tanks, valves and pipelines throughout the plant, and to deliver that information to the control system to notify operators of any leaks. This automated monitoring system has enabled the site to meet the latest government regulations for storage and handling of flammable liquids.

Installation by the plant’s maintenance team was quick and easy. Smart wireless technology eliminated the need for new instrumentation cabling and associated trenches and ducting, saving an estimated 50% of the cost and 90% of the time required to put in a conventional wired system.

Combining wireless technology with hydrocarbon sensors and sensing cable has provided effective leak detection for the large site. It illustrates how a plant can take advantage of wireless technology to gain business benefits — including enhanced safety and regulatory compliance — in applications beyond the process itself.
Emerson has introduced the first WirelessHART Power Meter, making electrical demand and consumption measurement available via a secure and reliable network across numerous markets.

In an ongoing effort to help customers face the challenge of meeting more stringent energy standards and improve equipment reliability, Emerson incorporated WirelessHART technology into a revenue-grade wireless power meter to deliver a unique measurement solution that will greatly improve energy efficiency and sustainability. WirelessHART communication technology ensures secure and reliable data transmission. The power meter’s small physical footprint and WirelessHART technology makes it simple and quick to install, enabling businesses to monitor voltage, current, power, energy, and other electrical parameters on single-and three-phase electrical systems in real-time with revenue-grade accuracy. Real-time monitoring of electricity consumption and instantaneous demand enables more granular energy management and effective equipment monitoring, securely and reliably.

“The introduction of the Wireless Power Meter to processing, industrial, cold chain storage facilities, data centers and more will enhance energy saving capabilities and reliability in existing infrastructure through a secure and robust wireless network,” said Sandeep Nair, president of Emerson’s Therm-O-Disc business. “We are enabling customers to better understand their power usage, power quality and therefore improve their energy efficiency.”

For more information, please visit the Emerson website.
Endress+Hauser: Fit for the Future with Proline 300/500

By FieldComm Group
Apr 05, 2017

Endress+Hauser’s new generation of flowmeters build on over 40 years of experience in flow measurement. A combination of well-proven flow sensors and innovative transmitter technology ensures that they are well prepared to meet the oncoming challenge of digitalization. The portfolio covers all applications, from simple quantity measurement through process control to highly accurate custody transfer. Multivariable measurements are also possible, e.g. mass flow, volume flow, density, concentration, viscosity and temperature (Coriolis) or volume flow, temperature and conductivity (Magmeters). Every device is checked using accredited and traceable calibration facilities (ISO/IEC 17025).

The state-of-the-art transmitter offers NAMUR NE 107 diagnostics, ensuring quick and simple trouble-shooting – possible remedies are offered with every device diagnostic. Heartbeat Technology provides permanent self-diagnosis as well as certified and metrologically traceable verification, allowing application-specific calibration intervals to be extended. An integrated web server supports connection of a laptop and WLAN allows data retrieval via wireless – a global first. These and other innovations ensure that operation, maintenance and calibration are done with the utmost efficiency, saving time, effort and money.

Proline 300/500 flowmeters are available with various communication protocols including HART 7 with enhanced burst mode.

For more information, please visit the Endress+Hauser website.
FINT Offers Affordable Way to Integrate HART Transmitters into FOUNDATION Network

By FieldComm Group
Apr 05, 2017

FINT’s White Series gateways are the perfect solution for control system integrators who need to incorporate legacy equipment into their systems. Manufacturers of measurement devices and analyzers wishing to extend the market for their existing products are now able to offer solutions in a straightforward way and with a bare minimum of investments.

These protocol converters offer interconnectivity between simpler bus types, such as Modbus RTU and HART, to more sophisticated buses like Profibus DP/PA and FOUNDATION Fieldbus.

In its portfolio of DIN rail-mounted converters, FINT also provides solutions for manufacturers of Modbus RTU devices who want to communicate on HART and WirelessHART networks.

For more information, please visit the FINT website.
Moore Industries Delivers Next Generation of Smart HART Dual Input Temperature Transmitters

By FieldComm Group
Apr 05, 2017

The THZ3 and TDZ3 mark the next generation of smart HART temperature transmitters from Moore Industries. They feature our industry-leading durability and reliability combined with new features that increase usability and functionality including a new dual sensor input.

These transmitters provide an isolated and linear 4-20mA output proportional to input and configure easily to accept a direct signal input from a wide array of sensors and analog devices. You can build custom curves with up to 128 points for non-standard or special inputs.

**Dual Input:** Dual sensor input means that you get backup and fail-over protection because the transmitters allow either of the sensors or inputs to be designated as the primary measurement and the secondary input acting as a backup sensor in case of primary sensor failure. Unlike other dual input transmitters, the THZ3 and TDZ3 offer auto-recovery after a fail-over event by automatically re-designating the new sensor as the PV without operator intervention. More dual input features:

- Average and Differential measurement
- High-Select and Low-Select
- Dynamic Variable Mapping

Advanced Control and Monitoring: The THZ3 and TDZ3 come with Device Intelligence, a series of features for smarter control and monitoring including sensor drift, corrosion detection, smart range alarms and a high availability option.

*For more information, please visit the Moore Industries website.*
Phoenix Contact recently received FF-846 registration for its 8- and 12-spur Zone 1 barriers. Designed with many new features not presently available in the market, the barriers offer multiple shielding options, an innovative power start-up method, and spur over-current restart technique. Weighing about a kilogram, the lightweight low-profile design offers increased 2g vibration and 15g shock resistance values. The barriers have spurs isolated in groups of four, and comply with the Entity/FISCO parameters.

The DIN rail-mounted barrier offers connectivity to one side, and occupies a footprint of just less than an 8 ½” x 11” sheet of paper (142 mm x 279 mm) in a control cabinet or junction box. In addition, standard shielding rail accessories can be used within this same footprint. The device has IECEx, ATEX, and UL approvals, is ANSI-ISA 71.04 G3 (Harsh) tested and is suited for operating temperature of -40°C to 80°C.

For more information, please visit the Phoenix Contact website.
ProComSol Offers Android HART Communicator

By FieldComm Group
Apr 05, 2017

With ProComSol, Ltd.’s DevComDroid Smart Communicator App and Bluetooth HART modem, your Android tablet or smartphone becomes a full-featured, DD-based HART communicator at the fraction of the cost of a traditional handheld communicator.

Perform complete HART device configurations using your Android device. DevComDroid uses the registered DD files from the FieldComm Group for complete access to all features of the device, including Methods. Save and write saved configurations. No tag limits. Convenient and easy to use!

For more information, please visit the ProComSol website.
Meggit Inc. Wilcoxon Research's HART-enabled, field configurable vibration sensor is the first smart HART vibration sensor for industrial environments. The PCH420V programmable transmitter allows vibration data to be accessed using existing HART-enabled process automation and condition monitoring infrastructure. Features include:

- Field configuration
- Three user-configurable bands offer flexibility of condition-based maintenance
- Multi-drop installations enable monitoring of up to 16 sensors through a single address port
- Powered by the network for continuous coverage and easy integration without extra infrastructure and cable costs
- CE approved

Are you ready to solve your vibration monitoring needs using one of the most popular and widely used industrial protocols today? Now, it's easier and more convenient to analyze vibration data on your critical rotating equipment using existing HART networks as part of your process automation, condition monitoring and machinery diagnostics application. Take advantage of our smart, HART-enabled sensors that provide many advantages, including the ability to more accurately identify machine faults like unbalance, alignment, looseness and bearing wear condition. The PCH420V enables the Internet of Things.

For more information, please visit the Wilcoxon Research website, email wilcoxon@meggitt.com, or call 1-800-WILCOXON.