



Field Communication Insider

Amanda, *Field Communication Insider* is an e-newsletter featuring the latest news and developments in the application of HART, FOUNDATION Fieldbus and FDI technology around the world. To ensure that you continue to receive *Field Communication Insider*, please add control_news@putman.net to your address book and [subscribe here](#).

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NEWS

FieldComm Group Announces Plant of the Year Recipient in India

FieldComm Group participated in Automation India Expo 2018, held August 29 to September 1 in Mumbai, India, and conducted a press conference to announce that Mangalore Refinery and Petrochemical Limited (MRPL) has been named its 2018 Plant of the Year. [Read more.](#)

Newest Member Company: Coto Measurement System

Coto Measurement System is the newest member of FieldComm Group. The company integrates energy-saving products, automatic intelligent control solutions, industrial automation systems, instrumentation, valve manufacturing, and sales & engineering for the electric power, chemical and metallurgy markets. [Read more.](#)

Alcont Ltd. Seeks to Utilize HART Protocol in Pressure Sensing Products

Alcont Ltd., a company devoted to vibration measurement, monitoring, early damage prevention and machinery protection technologies, has joined FieldComm Group. [Read more.](#)

Korean Instrumentation Manufacturer Samil PNU Joins FieldComm Group

Samil PNU Co., Ltd. is another new member of FieldComm Group. As a manufacturer of temperature transmitters and measurement instrumentation used in a wide range of industries, it is planning to develop pressure transmitters employing the HART Communication Protocol. [Read more.](#)

TECHNOLOGY

Article and Video Describing FDI Security Available on Ask4FDI.com

Automation end-users can learn about cyber security challenges faced by the process automation industry, security measures taken in FDI, and the benefits of the technology in mitigating security threats. [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.](#)

WIRELESSHART CORNER

Wireless Remote Monitoring Improves Data Gathering on Wellheads

Kuwait Oil Company, a major global oil producer headquartered in Ahmadi, Kuwait, decided to adopt *WirelessHART* technology and preconfigured software because it felt this approach would increase standardization and facilitate getting production online faster. [Read more.](#)

PRODUCTS

New product news you might be interested in:

- [Emerson Adds HART 7 Position Transmitter Option for Switchbox Users](#)
- [Endress + Hauser Provides Compact HART Transmitter for Analytics](#)
- [FCI Offers HART Compact Thermal Flow Meters](#)
- [Microcyber WirelessHART Adapter Enables Device Wireless](#)
- [Moore Industries' Safety Isolators Provide Isolation/Conversion for HART Signals](#)
- [ProComSol Delivers Mobile HART Communicator iOS App](#)

Non-intrusive process temperature measurement

For increased cost-efficiency, Emerson's Rosemount X-well Technology can cut the cost of each temperature measurement point by 29%. Engineered without thermowells, this non-intrusive solution reduces engineering design time by 65% and installation time by 70%. Easy. Reliable. Accurate.

[Learn more.](#)



Upcoming Events

North America

Emerson Exchange

San Antonio, Texas, USA
October 1-5, 2018

[» More Information](#)

Rockwell Automation Fair

Philadelphia, Pennsylvania, USA
November 14-15, 2018

[» More Information](#)

HART Developer Training

Austin, Texas, USA
November 12, 2018

[» More Information](#)

FDI Developer Training

Austin, Texas, USA
November 14, 2018

[» More Information](#)

FOUNDATION Fieldbus Developer Training

Austin, Texas, USA
December 4, 2018

[» More Information](#)

Europe, Middle East, Africa (EMEA)

FOUNDATION Fieldbus Developer Training

Düsseldorf, Germany
Nov. 6, 2018

[» More Information](#)

SPS Drives

Nuremberg, Germany
November 27-29, 2018

[» More Information](#)

HART Developer Training

Düsseldorf, Germany
December 10, 2018

[» More Information](#)

FDI Developer Training

Düsseldorf, Germany
December 12, 2018

[» More Information](#)

Asia Pacific

FDI Workshop

Shinjuku, Japan
October 26, 2018

[» More Information](#)

M&C Show

Osaka, Japan
November 7-9, 2018

[» More Information](#)

General Assembly

Singapore
December 3, 2018

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CONTROL

PROMOTING EXCELLENCE IN PROCESS AUTOMATION

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FieldComm Group Announces Plant of the Year Recipient in India

Mangalore Refinery and Petrochemical Limited (MRPL) has been named its 2018 Plant of the Year

By FieldComm Group

Sep 21, 2018



FieldComm Group participated in Automation India Expo 2018, held August 29 to September 1 in Mumbai, India, and conducted a press conference to announce that Mangalore Refinery and Petrochemical Limited (MRPL) has been named its 2018 Plant of the Year.

FieldComm Group President and CEO Ted Masters congratulated MRPL on its successful implementation of FOUNDATION Fieldbus and HART Communication Protocol. Utilizing installation savings and advanced diagnostics from over 9,000 FOUNDATION and 5,000 HART devices, MRPL saved over \$6,000,000 in project cost alone.

Masters stated, "End users will continue to use multiple communication protocols in their facilities to optimally address process automation use cases. The most adept users will also take advantage of smart data and the tremendous cost savings enabled through its use. MRPL is a great example of using smart data and we are grateful that they applied for and won this year's Plant of the Year Award."

Mr. B. Sudarshan, Chief General Manager of Instrumentation & Electrical at MRPL, described his company's experience with FieldComm Group technologies. He said, "FOUNDATION Fieldbus provided a 50 percent savings with

I/Os, cabling, maintenance utilization and installation costs when compared to conventional installations – saving \$6,600,000 in project costs alone. In terms of maintenance, FOUNDATION Fieldbus and HART utilized on our instruments, valves and positioners provide an average savings of 55 man days per month.”



Mr. Sudarshan continued, “Open standards have enabled us to derive value in many different scenarios throughout the entire plant. For example, HART is enabled in our safety systems that allow for partial stroke testing – avoiding the necessity to completely shut down. Control in the field provided by FOUNDATION Fieldbus allows MRPL to operate even in the event of critical hardware failure – giving our team peace of mind. In 2016, thanks to control in the field, we were able to keep our refinery processes running during a DCS upgrade that otherwise would have required a shutdown resulting in a production loss of \$800,000.”

MRPL has extensively deployed FieldComm Group technologies, including thousands of smart transmitters, intelligent valve positioners, and *WirelessHART* infrastructure. The company utilizes FOUNDATION fieldbus for process control, including control-in-the-field for many control loops. FOUNDATION fieldbus is also used for motor-operated valves (MOVs). Thanks to control-in-the-field, MRPL was able to upgrade its distributed control system (DCS) while critical control loops were kept running with the controller shutdown. *WirelessHART* sensors are employed for secondary level measurement in the tank farm, as well as leak/passing detection on control valves in flare applications.

In addition to cost savings in infrastructure and maintenance time, MRPL continues to receive savings in averted shutdowns and interruptions. In one instance where an unexpected shutdown would have occurred due to valve fault, valve positioner diagnostics identified an issue that allowed MRPL to avoid shutting down hydrogen generation – saving \$60,000 in startup and shutdown costs associated with fuel and energy loss.



For more information, please visit the [FieldComm Group website](#).

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Newest Member Company: Coto Measurement System

Company is committed to continuous research and innovation in the field of instrumentation

By FieldComm Group

Sep 21, 2018



Coto Measurement System is the newest member of FieldComm Group. The company integrates energy-saving products, automatic intelligent control solutions, industrial automation systems, instrumentation, valve manufacturing, and sales & engineering for the electric power, chemical and metallurgy markets. It is committed to continuous research and innovation in the field of instrumentation.

Coto Measurement System was founded in 2012 and is based in Shanghai, China. Additional offices are located in Yangzhou and Luoyang.

Coto joined FieldComm Group because the HART Communication Protocol serves the global process automation industry. Coto is also seeking to utilize the organization's communication standards, instructional material, development tools and technical guidance.

As a new FieldComm Group member, Coto looks to add the HART Communication Protocol to its valve positioners, temperature transmitters, pressure transmitters, pH transmitters, and radar level gauges.

For more information, please visit the [FieldComm Group](#) website.

Home / Articles / 2018 / Alcont Ltd. Seeks to Utilize HART Protocol in Pressure Sensing Products

Alcont Ltd. Seeks to Utilize HART Protocol in Pressure Sensing Products

By FieldComm Group

Sep 21, 2018



Alcont Ltd., a company devoted to vibration measurement, monitoring, early damage prevention and machinery protection technologies, has joined FieldComm Group. Alcont develops and produces vibro-measurement sensors with the HART interface for use in the oil & gas, power, and OEM compressor/pump industries. Its sensors measure vibration, displacement, pressure and temperature.

Alcont was founded in 2003 and its corporate office is located in Moscow, Russia.

As a new FieldComm Group member, Alcont plans to develop pressure sensors with the HART interface and participate in the development process of the HART protocol.

For more information, please visit the [Alcont Ltd.](#) website.

Korean Instrumentation Manufacturer Samil PNU Joins FieldComm Group

By FieldComm Group

Sep 21, 2018



Samil PNU Co., Ltd. is another new member of FieldComm Group. As a manufacturer of temperature transmitters and measurement instrumentation used in a wide range of industries, it is planning to develop pressure transmitters employing the HART Communication Protocol.

Samil PNU has been in business for 37 years, and its main office is in Guro-gu, Seoul, South Korea. The firm operates a production plant located in Incheon, South Korea.

The need for electronically controlled industrial instrumentation using standardized communication methods helped influence Samil PNU's decision to join FieldComm Group. And as a new member, Samil PNU is seeking HART Communication Protocol technical information and guidance for product registration.

For more information, please visit the [Samil PNU website](#).

Article and Video Describing FDI Security Available on Ask4FDI.com

By FieldComm Group

Sep 21, 2018



A new article and video describing current issues related to cyber security in the process industries and how Field Device Integration (FDI) helps solve them. Articles, details and a video have been posted on FieldComm Group's dedicated FDI information portal, www.Ask4FDI.com. Automation end-users can learn about cyber security challenges faced by the process automation industry, security measures taken in FDI, and the benefits of the technology in mitigating security threats.

FieldComm Group's Marketing and Business Development Manager, Talon Petty, commented, "FDI deploys state-of-the-art measures to mitigate today's increasing cyber security threats to process automation systems and devices. It enables system-wide integration of devices while providing additional capabilities and security. Our new article and video describe how FDI technology utilizes security measures such as time stamping on Device Package signatures, sandbox environments for UIPs, and various OPC UA security capabilities."

Providing a wide range of information related to FDI technology, www.Ask4FDI.com addresses the needs of various automation stakeholders and explains how they can integrate their systems and get data to the cloud to work smarter. For example, end users benefit from visiting the site's "Purchasing Requests" section where they can

download sample documents that can be used to “ASK 4 FDI” in products offered by their instrumentation vendors. Suppliers benefit from complete information about FDI Device Packages and other development resources.

FDI is a key standard for industrial organizations seeking a common platform to integrate and configure field devices that work on different protocols from different manufacturers. It is also an enabling technology that improves lifecycle cost and adds value through simplified device integration.

Developed through a collaborative process of major industry foundations and suppliers, FDI brings standardization to the packaging and distribution of all the software and tools necessary to integrate a device with a host system.

For more information, please visit the [FDI website](#).

Latest Registered FOUNDATION Fieldbus and HART Products

By FieldComm Group

Sep 21, 2018



New Registered Devices			
Protocol	Manufacturer	Type	Model/Device Name
HART	Barksdale, Incorporated	Pressure Transmitter	H455X
FOUNDATION Fieldbus	Dongfeng M&E Co., Ltd.	Coriolis Mass Flowmeter	DPT100
HART	Duon System	Pressure Transmitter	APT3800N
HART	Forbes Marshall	Valve Positioner	SmartPoz8400S
HART	Guangzhou City Xitai Auto-Control Facility Co. Ltd.	Temperature Transmitter	XTH300i
HART	Krohne Messtechnik GmbH	Pressure Transmitter	OPTIBAR 5060
HART	Krohne Messtechnik GmbH	Temperature Transmitter	TT53 C/R (Ex)
FOUNDATION Fieldbus	Mettler-Toledo GmbH	Multi-Parameter Transmitter	M400 4-wire FF
HART	Nivus GmbH	Flowmeter	NivuFlow
HART	Tokyo Keiso Co., Ltd.	Level Meter	TLRx400x500
Updated Registered Devices			

Protocol	Manufacturer	Type	Model/Device
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Name

HART	ABB Automation Products GmbH	Digital Positioner	EDP300
FOUNDATION Fieldbus	Emerson	Electric Actuator	Valve Automation CAM228/CAM28 FF
FOUNDATION Fieldbus	KROHNE Messtechnik	Variable Area Flowmeter	M40 ESK-FF
HART	SICK Engineering GmbH	Ultrasonic Gas Flowmeter	FLAWSIC 30
HART	Yokogawa Electric Corporation	Pressure Transmitter	EJX
HART	Yokogawa Electric Corporation	Pressure Transmitter	EJA-NEXT

Updated Electronic Device Description (EDD)

Protocol	Manufacturer	Type	Model/Device Name
FOUNDATION Fieldbus	Eaton Electric Ltd.	Fieldbus Barrier, 6 or 12 spur (FIDC - 163 bus powered)	937x/938x-FB(2) Series

Wireless Remote Monitoring Improves Data Gathering on Wellheads

By FieldComm Group

Sep 21, 2018



Kuwait Oil Company (KOC), a major global oil producer headquartered in Ahmadi, Kuwait, needed to improve its remote monitoring for wellheads. Manual procedures required frequent trips to each wellhead to record data, as well manual data entry to get this information into production optimization systems.

KOC originally relied on the pressure in underground formations to extract oil. But by late 2010, the company started depending on artificial lift stations to produce the required pressure, with the number of lift units increasing dramatically each year thereafter. Manual operation and monitoring of such a high number of wells began to be very tedious and time-consuming, and it presented hazards to field personnel.

Real-time automation with wired instruments was first introduced as a solution in early 2012. KOC started with a few wells, but early implementations indicated the average time needed to install the necessary wired instrumentation was one to two weeks per well – much too long given the hundreds of wells requiring upgrades.

The solution was to go wireless.

KOC decided to adopt *WirelessHART* technology and preconfigured software because it felt this approach would increase standardization and facilitate getting production online faster. All the instruments at each wellhead are connected to a wireless gateway, and the gateway is connected back to the central control and monitoring room via Wi-Fi and WiMAX networks. An RTU is installed at each site to provide the required local monitoring and control, and this unit is also networked back to the central control room via the gateway.

By eliminating most of the required wiring and corresponding infrastructure, installation time was reduced from one week per wellhead to two wells per day, a tenfold improvement. Installation costs were cut in half, saving \$3,000 per well. HSE risks were also reduced, as much less excavation and wiring work is required in these potentially hazardous areas. Data accuracy is in the range of 99.9% – more than sufficient for the application – and data availability is high.

A key benefit for KOC is a reduction in troubleshooting time as technicians have remote access to a wealth of information regarding the operation of each well. This allows them to diagnose problems quickly, and to arrive at the site with all the tools needed to address any issues.

With the expansion in artificial lift units and corresponding instrumentation, the variety and real-time availability of data is dramatically increasing in quantity and complexity. This promises to deliver even more benefits through optimization of wellhead operation, and ultimately the entire oil production system. Optimization will allow KOC to fine tune well production, and maintain oil reservoir recovery to meet production targets.

For more information, please visit the [FieldComm Group](#) website.

Emerson Adds HART 7 Position Transmitter Option for Switchbox Users

By FieldComm Group

Sep 21, 2018



Emerson has introduced a HART 7 position transmitter option for its TopWorx D-Series switchbox. The addition of the HART 7 Communications Protocol enables advanced diagnostic and monitoring capabilities for valve integrators and automators. It helps improve operational efficiency and maintenance planning for plants in process industries such as oil and gas, chemical, power, and refining.

“The TopWorx D-Series switchbox offers customers all the benefits of the HART 7 protocol, such as complete process valve position monitoring and alarm setting,” said Leandru Schiau, senior product manager at Emerson Automation Solutions for TopWorx switchbox.

The HART 7 position transmitter's easy-to-use LCD display and navigation buttons permit local 5-point calibration for more accurate setup on linear applications. Advanced diagnostic capabilities include measurements such as percent valve is open/closed, open and close dwell time, valve transition time – from open to close, and last open/close stroke time.

For more information, please visit the [Emerson website](#).

Endress + Hauser Provides Compact HART Transmitter for Analytics

By FieldComm Group

Sep 21, 2018



The latest addition to Endress+Hauser's analytical portfolio is the Liquiline Compact CM82, a pen-shaped transmitter only 110 mm long and 20 mm in diameter. It is designed for use with plug-in Memosens sensors, measuring pH, ORP and conductivity as well as dissolved oxygen and chlorine. Versions are available for explosion-hazardous areas and its tough PEEK enclosure exhibits an IP67, IP68 or NEMA Type 6 rating.

Despite its small size, the CM83 is a fully-fledged, loop-powered, multi-parameter transmitter. All configuration parameters are stored in the device. On exchange of the Memosens sensor, the CM82 immediately reads all sensor and calibration data from the replacement, and the measuring point is up and running within seconds of the exchange. Installation and maintenance could not be simpler!

In addition to its HART 7.0 interface, the CM82 also offers a secure Bluetooth connection. The security measures implemented to prevent unauthorized access, independently attested, correspond to those implemented in eID national identity cards. The transmitter itself can be configured with an iOS or Android device using the SmartBlue app, which is available in the Google's Play or Apple's App Store.

For more information, please visit the [Endress + Hauser](#) website.

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FCI Offers HART Compact Thermal Flow Meters

By FieldComm Group

Sep 21, 2018



Fluid Components International's (FCI) compact thermal flow meter line has been expanded with a new electronics design that features the addition of HART, Version 7 and digital bus communication.

The ST51A, ST75A and ST75AV thermal mass flow meter design combines all new surface-mount, lead-free RoHS-compliant electronics with highly accurate, repeatable all-welded, equal-mass flow sensors.

In addition to HART bus communications, standard ST51A, ST75A and ST75AV outputs are dual 4-20 mA that meet NAMUR NE43 and feature a 500 Hz pulse. The electronics are housed in an IP67-rated, dual-cable port transmitter enclosure available in aluminum or a new stainless steel version. The transmitter can be mounted directly to the flow sensor or remotely mounted up to 100 feet (30 meters) away.

For more information, please visit the [FCI website](#).

Microcyber *Wireless*HART Adapter Enables Device Wireless

By FieldComm Group

Sep 21, 2018



Microcyber's A1110 *Wireless*HART Adapter can integrate a traditional instrument into a wireless network without requiring any developing work, and co-existence with the existing system doesn't affect each other. The adapter can take electricity from a 4-20 mA loop and also use an external power supply. It supports HART and 4-20 mA devices.

The A1110 *Wireless*HART Adapter features:

- Wired device to own wireless communication capability
- Ability to dig deeper into diagnostic information and process data of instrument terminals
- Easy and fast installation, as well as the ability to connect several wired instruments
- Ability to increase process control invisibility, make it run more efficiently, and decrease downtime
- Intrinsic safety

For more information, please visit the [Microcyber](#) website.

Moore Industries' Safety Isolators Provide Isolation/Conversion for HART Signals

By FieldComm Group

Sep 21, 2018



Moore Industries' SSX and SST Safety Isolators and Splitters provide reliable isolation and signal conversion for HART data in functionally safe process control settings. Part of Moore Industries' FS FUNCTIONAL SAFETY SERIES, the two-wire (loop powered) SSX and four-wire (line/mains powered) SST have been certified by exida for single use in Safety Instrumented Systems (SIS) up to SIL 2. They were designed and built from the ground up to the strict IEC 61508:2010 standards for safety-related applications.

The SSX and SST protect safety systems by isolating an SIS from basic process control or monitoring systems so that disconnections or other failures don't impact the safety system. It also has 1500Vrms of isolating capability to protect safety I/O cards and systems from surges, spikes and transients in the field. Standard 20V/m RFI and EMI protection stops damages caused by radio frequencies and electromagnetic interference.

While most isolators "strip off" HART data, the SSX and SST pass along HART data to asset management systems, programming devices or host systems. In addition, the SSX stops ground loop noise and solves "bucking" power supply problems caused when two devices try to source power to the same loop.

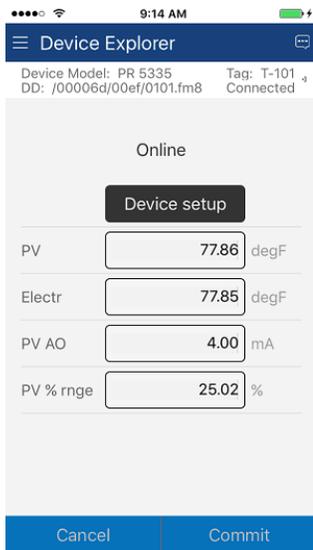
For more information, please visit the [Moore Industries website](#).

Home / Articles / 2018 / ProComSol Delivers Mobile HART Communicator iOS App

ProComSol Delivers Mobile HART Communicator iOS App

By FieldComm Group

Sep 21, 2018



A full-featured HART Communicator App is now available for your iPhone or iPad. Because the App uses the Device Descriptors (DDs) for the connected HART instrument, all instrument parameters, including Methods, are available to the user. The full DD library is also included.

For more information, please visit the [ProComSol](#) website.