

Freedom to Choose

Power to Integrate



Fieldbus Facts Online

Your Global Source for FOUNDATION™ Technology News

February 2011

Fieldbus Facts Online is brought to you by the Fieldbus Foundation, an international, not-for-profit corporation consisting of industry leaders dedicated to providing the "Freedom to Choose" and the "Power to Integrate."

Featured This Month



FOUNDATION Fieldbus ... we put the pieces in place



Endress+Hauser 
People for Process Automation

In This Issue...

Foundation Briefs

[Fieldbus Foundation welcomes latest EDDL enhancements](#)

Global News & Events

[Fieldbus Foundation unveils 2011 North American seminar, training schedules](#)

[Southern Africa Marketing Committee announces new officers, events schedules](#)

[Fieldbus plans educational events worldwide in 2011](#)

Technology News

[Help wanted! Volunteer now for FOUNDATION technical teams](#)



fieldbus solutions



**Installing
Fieldbus**
**Get This
Whitepaper!**

Sponsors



Power and productivity
for a better world™



EMERSON
Process Management

Endress+Hauser 
People for Process Automation

Honeywell

i n v e n s y s



Products & Solutions

[ABB System 800xA with fieldbus instrumental to Chinese power plant success](#)

[Invensys' innovative wizards help optimize Fieldbus system startup savings](#)

[MooreHawke fault-tolerant system achieves safe, reliable fieldbus communications](#)

[MTL's 'Eco Power' Fieldbus power supply ideal when low power loss is crucial](#)

[Pepperl+Fuchs offers complete Fieldbus physical layer solutions](#)

[Rockwell's asset management software features process device configuration](#)

[Siemens' first 78 GHz radar-level transmitter for solids sets up in minutes](#)

[Yokogawa's upgraded device management wizard supports Chinese language](#)

HAWKE
FIELDBUS
WORLDWIDE

中科博微
Microcyber


Relcom

 **PEPPERL+FUCHS**
PROTECTING YOUR PROCESS

 **PHOENIX
CONTACT**

**Rockwell
Automation**


POLYTECHNIC

SIEMENS

TRINE
UNIVERSITY


STAHL


YOKOGAWA

Fieldbus Foundation welcomes latest EDDL enhancements



The Fieldbus Foundation welcomes the latest Electronic Device Description Language (EDDL) enhancements, which are incorporated in the second edition of the International Electrotechnical Commission (IEC) 61804-3 standard. The technology provides a universal, proven, state-of-the-art method for accessing the diagnostic, real-time, and asset management information in millions of industrial field instruments while ensuring optimal data and device interoperability.

EDDL is a text-based language for describing the digital communication characteristics of intelligent devices and equipment parameters in an operating system (OS) and human machine interface (HMI) neutral environment. EDDL assists engineers during distributed control system (DCS) configuration, technicians during commissioning and maintenance using device configuration software for laptop or

handheld field communicators, and operators working at DCS consoles or using intelligent device management software as part of asset management solutions.

With EDDL, a user can calibrate instruments, diagnose problems, provide data for user interface displays, identify process alarms, and obtain information for high-level software systems such as manufacturing execution systems (MES), supervisory control and data acquisition (SCADA), plant historians, asset management, and enterprise resource planning (ERP). The technology is key to interoperability in digital process automation architecture, enabling control systems and intelligent field devices from different manufacturers to work together.

EDDL enhancements include:

- Support for modular devices such as I/O subsystems that can be populated with new I/O cards over time without having to upgrade system software;
- Support for offline configuration with default parameter values suggested by the device manufacturer to simplify and speed up device commissioning;
- Support for Unicode character sets to display parameter labels, diagnostics, and device manufacturer expert-help text in a variety of languages, including Japanese and Chinese;
- Ability to display device diagnostics from different blocks and setup information on a single page, making devices easier to use and speeding the completion of commissioning and maintenance tasks;
- Ability to display information based on prior selections and internal dependencies in the device, presenting only valid options so as not to clutter the pages or “wizards” (methods) with irrelevant information or waste technician time by prompting for information that will not be used or options that do not apply; and
- Ability to display illustrations based on the chosen language, such as images with explanatory text conveying know-how from the device manufacturer to assist in the interpretation of advanced diagnostics and guide setup and troubleshooting.

Fieldbus Foundation President and CEO Rich Timoney said he was excited about the EDDL enhancements: "The latest enhancements increase the value proposition of EDDL for the entire plant automation industry," said Timoney. "The FOUNDATION fieldbus Version 5.1 specification is based on this standard, which provides interoperability across multiple hosts, devices, and technologies. This flexibility allows the end user to choose the best combination of price and performance for devices and software. Competitive bids are easier to evaluate because the end user does not have to worry if specific software packages are available to support various devices. With EDDL, all control systems support comparable EDDL devices. Interoperability means operators and maintenance personnel can easily find the calibration and diagnostic information needed for a particular device, and all EDDL-compatible devices will provide the necessary information in a 'look and feel' of the host system."

Initially developed in 1992, EDDL technology forms the engineering and operating foundation on which all major digital automation protocols—FOUNDATION fieldbus, HART, and Profibus—construct parametric and device descriptions. Because EDDL is an open technology with international standard status, it can be applied easily and effectively to any device and fieldbus protocol. The EDDL solution lets host system manufacturers create a single engineering environment that can support any device from any supplier using any communications protocol without the need for custom software drivers for each device type. Simple and complex devices can be managed from the same software with

full access to advanced functionality to complete tasks such as commissioning, setup, calibration, and diagnostics. As devices become more sophisticated, EDDL makes them easier to use.

EDDL has a long track record of ensuring backwards compatibility through revisions of the IEC standard. The latest edition does not make installed devices and systems incompatible; rather, EDDL files can be uploaded to the control system without the need for retraining. Moreover, like the graphical enhancements in the 2006 edition, the current updates have been incorporated without relying on executable software.

All unique advantages of the original technology still apply, including:

- Ability to incorporate diagnostics for critical devices in DCS operator consoles, where they become a natural part of daily maintenance procedures;
- Consistent diagnostic look and feel regardless of manufacturer, protocol, or device type; content and structure for system displays defined by the device manufacturer;
- Ability to keep systems current with new device types and versions without the difficulties associated with installing software and license key overhead;
- Investment preservation through the elimination of obsolescence by future versions of Microsoft Windows service packs or .Net framework;
- Compact, bundled files which are easy to download or email;
- Third-party interoperability tested as a package during device registration; and
- Automatic population of a common OPC server shared by all devices.

For more information on the enhancements, visit the [EDDL website](#).

[Return to Top](#)

Global News & Events

Fieldbus Foundation unveils 2011 North American seminar, training schedules

The Fieldbus Foundation's 2011 North American end-user seminar and developer training schedule is now available. The seminar program helps process industry end-users understand the economic benefits of the FOUNDATION automation infrastructure. The developer training program gives control and instrumentation suppliers vendor-neutral instruction on key aspects of fieldbus technology.



The first end-user seminar of 2011 will be held in Calgary, Alberta, Canada. Additional events are scheduled for Fort McMurray, AB in Canada, and for Bakersfield, CA, Carson, CA, Corpus Christi, TX, Clear Lake, TX, and Houston, TX in the USA. Dates for these seminars will be announced shortly. End-user seminars also are set for later this year in Rio de Janeiro on June 16 and in Mexico City on August 23.

The first "Introduction to FOUNDATION Fieldbus" and "Advanced Principles of FOUNDATION Fieldbus" developer training courses of 2011 will be held May 17-19, in Austin, TX. These seminars will be held again in November, also in Austin. "Introduction to FOUNDATION Fieldbus will take place Nov. 15, 2011 and "Advanced Principles of FOUNDATION Fieldbus will follow on Nov. 16-18, 2011.

Developer training is also available in Frankfurt, Germany. More information on these seminars may be found in the Global Events calendar elsewhere in this newsletter.

Directed at process control end users and engineering firms, these one-day seminars cover all aspects of FOUNDATION automation infrastructure management. They address core technology topics including open, scalable integration/segment design and layout; process integrity/safety integrity levels (SIL) and safety instrumented functions (SIF); and business intelligence/maintenance and troubleshooting. Each topic is discussed in detail for 45 min. to an hour; a 15 to 20 min. hands-on demonstration follows immediately to help reinforce the material. A discussion about newer advances such as field diagnostics, control in the field (CIF), and wireless is also included. In addition, end-user speakers present case studies about their fieldbus applications. A demonstration of Electronic Device Description Language (EDDL) technology concludes the seminar.

Each 2011 end-user seminar participant receives a certificate that can be used for PDH hours, plus hard copies of presentation materials. Lunch is included.

For device developers who require assistance implementing FOUNDATION technology in their instrumentation product line, the Fieldbus Foundation offers a complete developer training curriculum. Attending one of these informative courses can help suppliers get on the "Fast Track to Fieldbus."

"Introduction to FOUNDATION Fieldbus" is an introductory course designed for developers, end users, marketing professionals, applications engineers, system integrators, and others interested in acquiring a fundamental knowledge of FOUNDATION technology. Students become familiar with basic concepts and new terminology related to the FOUNDATION integrated architecture, and they gain an understanding of the strategies for wiring and installing a fieldbus network. Design issues such as power requirements, device types, and topologies are emphasized. This updated course also includes new information about grounding and shielding and safety instrumented functions (SIF).

"Advanced Principles of FOUNDATION Fieldbus" is intended for manufacturers and developers of fieldbus hardware and software and is best suited for development engineers, test engineers, and those seeking to understand the detailed, inner workings of a FOUNDATION fieldbus device. The course covers major tools used by FOUNDATION device developers. Students gain an understanding of the basics of the bus monitor. They are taught to apply this tool in interactive exercises demonstrating fieldbus communications and the use of filters for network troubleshooting. The foundation's automation infrastructure for communications between fieldbus devices and field instruments and hosts is also covered.

Learn more about the 2011 North American end-user seminars and developer training courses on the Fieldbus Foundation [website](#).

[Return to Top](#)

Southern Africa Marketing Committee announces new officers, events schedules



The Fieldbus Foundation Southern Africa Marketing Committee (FFSAMC) announced its new officers and 2011 events schedule at the recent FFSAMC Annual General Meeting held at ABB's Johannesburg facility Jan. 18, 2011.

Gary Friend, MTL/Extech, formerly vice-chairman and training/technical representative, replaces Paulo de Sousa Gomes, Honeywell, as chairman. Derrick Mulligan, Weidmüller/Phambili Interface, takes over as vice-chairman. Greg Christison, Smar/Allpronix, assumes the marketing role, and Rodney Englund, Endress+Hauser, and Mornay Beck, STC-SA, take responsibility for the training/technical function. Rob Burns, Pepperl+Fuchs/P+F Products, takes the new post of Fieldbus

Foundation end-user group liaison, and Brandon Topham, Turck/RET Automation Controls, and Hennie Bignaut, Endress+Hauser, continue as treasurer and secretary, respectively.

Marc Van Pelt, Fieldbus Foundation vice-president—EMEA, welcomed the new committee members. "Since its launch in 2007, the FFSAMC has continued to play a significant part in the promotion of FOUNDATION technology in the Southern Africa region through its participation in exhibitions, roadshows, and end-user seminars. I would like to thank Paulo de Sousa Gomes and the other outgoing officers for their commitment over the last few years. I look forward to working with the new committee and supporting their extensive plans over the years to come."

A strong presence in local exhibitions and roadshows is an integral part of the FFSAMC's marketing plans. Having participated in the 2009 and 2010 series of CONTROL roadshows across South Africa, the committee has announced its continued participation in the 2011 series. These dedicated control measurement and instrumentation exhibitions broadly focus on automation in industry and will be held during 2011 at these locations:

- Feb 3: Bellville Civic Centre, Cape Town
- March 17: Durban Light Infantry Hall, Durban
- June 7: Wanderers Club, Windhoek
- June 9: Civic Centre, Walvis Bay
- July 21: Sasol Club, Secunda
- August 18: ETC Training Centre, Port Elizabeth
- October 20: Quest Conference Centre, Vanderbilpark

For more, [email Debbie Scott](#), or visit the [What's New in Processing website](#), which also offers registration information.

The FFSAMC has also confirmed plans to exhibit at the biennial Process Expo 2011 to be held at the NASREC expo centre (Hall 5), Johannesburg, May 17-19, 2011. With its 18 sq m stand and use of live demonstration systems for its FOUNDATION fieldbus training sessions, the FFSAMC aims to show prospective end users the functionality and ease of use of FOUNDATION technology and demonstrate the extensive range of fieldbus systems, devices, and services available.

Process Expo 2011 will offer a complete overview of the automation world by showcasing solutions enabling the control, regulation, and automation of processes and operations. In addition to focusing on process automation, instrumentation, and control, it will also place a strong emphasis on education and training, including a program of presentations in dedicated training rooms adjoining the main exhibition area. The daily program will include live demonstrations of FOUNDATION technology using newly commissioned, working systems.

These demonstrations/training sessions will be conducted by a representative of STC-SA (Pty) Ltd., the Johannesburg-based training center affiliated with STC Brielle, the Netherlands-based training center certified by the Fieldbus Foundation under the FOUNDATION Certified Training Program (FCTP). The FCTP establishes uniform standards for fieldbus educational curriculum around the world; defines acceptable levels of learning for students of FOUNDATION technology; and ensures the availability of thorough, comprehensive, and accredited training to the process automation marketplace.

FFSAMC sponsors of the Fieldbus Foundation stand at Process Expo 2011 include ABB, Emerson Process Management, Endress+Hauser, Honeywell, MTL/Extech, Pepperl+Fuchs/P+F Products, Samson/Samson Controls, Smar/Allpronix, STC-SA, Turck/RET Automation Controls, Weidmüller/Phambili Interface, and Yokogawa.

In addition to the exhibition schedule, the FFSAMC and STC-SA have announced the first formal FOUNDATION fieldbus training opportunities in Southern Africa for 2011. A five-day, FOUNDATION Fieldbus Certified Technical Specialist training course will be offered at the STC-SA facility in Johannesburg May 30-June 3, June 6-10, and June 13-17, subject to demand.

For more information about STC-SA training opportunities, email [STC-SA](#).

For information about the centers certified under the program and the courses offered, visit the education section of the [Fieldbus Foundation website](#).

For more about the FFSAMC and its activities in the Southern Africa region, visit the Southern Africa section of the [Fieldbus Foundation website](#).

[Return to Top](#)

Fieldbus plans educational events worldwide in 2011

The Fieldbus Foundation will be holding informational and educational events around the world in 2011. Make plans now to attend an event in your area.

LOCATION	DATE	EVENT and CONTACT INFORMATION
EVENTS IN THE AMERICAS		
Calgary, Alberta, Canada	To be determined	FOUNDATION Fieldbus End User Seminar More information to come
Fort McMurray, Alberta, Canada	To be determined	FOUNDATION Fieldbus End User Seminar More information to come
Bakersfield, California, USA	To be determined	FOUNDATION Fieldbus End User Seminar More information to come
Carson, California, USA	To be determined	FOUNDATION Fieldbus End User Seminar More information to come
Austin, Texas ,USA	May 17, 2011	Developer Training – Intro to FOUNDATION Fieldbus Click here for more information

Austin, Texas, USA	May 18-20	Developer Training – Advanced Principles of FOUNDATION Fieldbus Click here for more information
Rio de Janeiro, Brazil	June 16, 2011	FOUNDATION Fieldbus End User Seminar More information to come
Mexico City, Mexico	Aug. 23, 2011	FOUNDATION Fieldbus End User Seminar More information to come
Corpus Christi, Texas, USA	To be determined	FOUNDATION Fieldbus End User Seminar More information to come
Clear Lake, Texas, USA	To be determined	FOUNDATION Fieldbus End User Seminar More information to come
Houston, Texas, USA	To be determined	FOUNDATION Fieldbus End User Seminar More information to come
Austin, Texas, USA	Nov. 15, 2011	Developer Training – Intro to FOUNDATION Fieldbus Click here for more information
Austin, Texas, USA	Nov. 16-18, 2011	Developer Training – Advanced Principles of FOUNDATION Fieldbus Click here for more information

EVENTS IN EMEA (EUROPE, MIDDLE-EAST, AFRICA)

Durban, South Africa	Mar. 17, 2011	CONTROL Roadshow Click here for more information
Frankfurt, Germany	March 22, 2011	Developer Training – Intro to FOUNDATION Fieldbus Click here for more information
Frankfurt, Germany	March 23-25, 2011	Developer Training – Advanced Principles of FOUNDATION Fieldbus Click here for more information
Brno, Czech Republic	March 29-April 1, 2011	AMPER 2011 Trade Fair FOUNDATION Fieldbus Presentation Click here to email for more information
Zlatibor, Serbia	April 2011	FOUNDATION Fieldbus Fundamentals Presentation Click here for more information
Hannover, Germany	April 4-8, 2011	Industrial Automation Exhibition, Hannover Messe Click here for more information
Johannesburg, South Africa	May 17-19, 2011	PROCESS 2011 Exhibition, FOUNDATION Technology Training Click here for more information
Plock, Poland	May/June 2011	FOUNDATION Fieldbus Live – Instrumentation Roadshow Click here for more information
Windhoek, South Africa	June 7, 2011	CONTROL Road Show Click here for more information
Walvis Bay, South Africa	June 9, 2011	CONTROL Road Show Click here for more information

Secunda, South Africa	July 21, 2011	CONTROL Road Show Click here for more information
Port Elizabeth, South Africa	Aug. 18, 2011	CONTROL Road Show Click here for more information
Frankfurt, Germany	Sept. 20, 2011	Developer Training – Intro to FOUNDATION Fieldbus Click here for more information
Frankfurt, Germany	Sept. 21-23, 2011	Developer Training – Advanced Principles of FOUNDATION Fieldbus Click here for more information
Linz, Austria	Oct. 4-6, 2011	FOUNDATION Fieldbus Presentation, SMART Automation Click here for more information
Vanderbilpark, South Africa	Oct. 20, 2011	CONTROL Roadshow Click here for more information
University of Miskolc, Lillafüred, Hungary	Oct. 24-26, 2011	DCS17 Conference Click here for more information

EVENTS IN ASIA/PACIFIC

Thailand	To be determined	FOUNDATION Fieldbus End User Seminar More information to come
Malaysia	To be determined	FOUNDATION Fieldbus End User Seminar More information to come
Jakarta, Indonesia	To be determined	FOUNDATION Fieldbus End User Seminar More information to come
The Philippines	To be determined	FOUNDATION Fieldbus End User Seminar More information to come
Osaka, Japan	To be determined	FOUNDATION Fieldbus End User Seminar More information to come
Korea	To be determined	FOUNDATION Fieldbus End User Seminar More information to come

For more information, visit the Fieldbus Foundation [website](#).

[Return to Top](#)

Technology News

Help wanted! Volunteer now for FOUNDATION technical teams



Among the many exciting benefits of Fieldbus Foundation membership are early access to the latest FOUNDATION technical specifications and development tools for faster time to market and discounts on fieldbus training. Company volunteers also may participate in the various steering committees, technical teams, and working groups that help support aspects of FOUNDATION technology important to all members and that help meet the needs of the global process automation industry.

Consider joining one of the following teams which currently have openings for foundation member volunteers:

- **Wireless and Remote Input/Output (WIO) Development Project.** The HSE Remote I/O (HSE-RIO) Development Team is dedicated to preparing specifications for a wired HSE backhaul network, a wireless HSE backhaul integrating various wireless gateways, and an interface to wireless field device networks.
- **Wireless and Remote I/O Validation Team.** This team is dedicated to the development and validation of both wired and wireless High Speed Ethernet (HSE) gateways for WirelessHART and ISA100.11a. Team members must provide prototypes of such devices to participate. The devices are then tested against the current specifications and errors resulting from those tests are analyzed to determine if the prototypes or specifications need to be changed.
- **Wireless Sensor Interface Development Team.** This team is dedicated to the development of a Wireless and Remote I/O gateway between WirelessHART and ISA100.11a field devices and the foundation's HSE communication protocol, including development of technical specifications for wireless and security management of the WIO gateway and field devices. Interested members must be familiar with FOUNDATION technology, ISA100.11a wireless standards, and I/O gateway development.
- **Fieldbus Foundation/ISA100.15 Cooperation Wireless Backhaul Technical Specification Development Team.** This team is dedicated to the development of the architecture, specifications, and guidelines for network interfaces to support use of the HSE protocol over wireless backhaul networks such as Wi-Fi, WiMAX and satellite. This finds great use in applications with isolation scenarios, such as tank farms or hazardous environments.
- **Lab Integration Team.** Dedicated to improving the device integration user experience with FOUNDATION fieldbus products, this team identifies interoperability/usability issues discovered during integration testing of multi-vendor applications.
- **Common Software Download Specification Maintenance Team.** This team is dedicated to improving interoperability and system reliability when receiving software updates between any field device and a host system regardless of the manufacturers.
- **High Speed Ethernet Specification Maintenance Team.** This team is dedicated to maintenance and improvement of the High Speed Ethernet realm, including its design, implementation and interoperability verification. Its scope includes field device access agents, HSE system management, network management, redundancy, and profile interoperability.
- **Function Block Maintenance Team.** This team is dedicated to reviewing and resolving action requests for the Function Block Application Process Parts 1 through 5 technical specifications. Team members should be familiar with FOUNDATION fieldbus and function blocks in the process control industries.
- **System Integration and Maintenance (SIM) Team.** Dedicated to reviewing and resolving action requests filed against the Device Description Language Specification, Common File Format Specification, Device Description Interoperability Specification, and Host Interoperability Support Test Profile and Procedures, this team is chartered with ensuring interoperability between field devices and host applications using Electronic Device Description Language (EDDL) technology.
- **Transducer Block Development and Maintenance Team.** This team is dedicated to reviewing and resolving action requests filed against the current transducer block specifications and determining new transducer block profiles to be specified.
- **H1 Physical Layer Specification Maintenance Team.** This team is dedicated to reviewing and resolving action requests filed against the H1 Physical Layer Specification, Physical Layer Test Specification, Cable Test Specification, Coupler Test Specification, and Power Supply Test Specification.

To volunteer your support to a foundation technical team, go to the [Fieldbus Forums section](#) of the Fieldbus Foundation website. An account with member access privileges is needed to access this area. To sign up for an account, go to the [Fieldbus Forums section](#) of the Fieldbus Foundation website and click on Register. If you are unable to access this application, [email](#) Member Services to activate your member privileges.

For more information about membership benefits, visit the Fieldbus Foundation [website](#).

[Return to Top](#)

ABB System 800xA with fieldbus instrumental to Chinese power plant success



Thanks in large part to fieldbus technologies, the new 660-MW Yuanyanghu supercritical coal-fired boiler and direct air-cooled cold power generator reached the end of a record-setting startup in December 2010. FOUNDATION fieldbus was used in the boiler, turbine, and fuel gas desulfurization units and, along with other fieldbus technologies, is credited with contributing to the record-setting project in China for a generator of this size. Other accomplishments included:

- Commissioning start to 168-hour full-load test completed in 50 days;
- First boiler firing to the 168-hour full load test completed in less than 18 days; and
- Full project time frame completed in less than one year.

In addition to an ABB System 800xA and multiple fieldbus infrastructures, the project used advanced controls, real-time diagnostics, and asset management and optimization. This first phase of the Yuanyanghu plant has two 660-MW units. A planned second phase has two additional 1,000-MW units.

Although FOUNDATION fieldbus is relatively new to the power generation industry in China, its success to date has resulted in the technology being planned for other new installations and upgrades.

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

[Return to Top](#)

Invensys' innovative wizards help optimize Fieldbus system startup savings

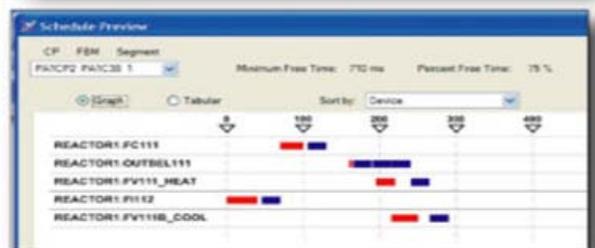
With its innovative wizards, the latest Invensys I/A Series Release 8.5 and 8.6 systems offer unprecedented time savings in starting up FOUNDATION fieldbus systems. Benefits include:

- **Half the device preparation time.** A new preparation wizard minimizes the time required for loop checks, synchronizing device and system tags, setting devices as Basic or Link Master, and ensuring correct device system management communication settings.
- **Up to 90% savings in configuration-setting deployment.** Many systems take a long time and require excessive human supervision to ensure configurable parameters in device resource, transducer, and function blocks are properly set. But not the I/A Series system. A control strategy block deployment wizard automatically kicks off a process in which every FOUNDATION interface card and H1 segment downloads settings in parallel, automatically, with no further user interaction.
- **Automatic LAS schedule calculation.** No guesswork and zero time. Whether the project is using Control in the Field, Control in the Host, or both, the field device engineering tool automatically calculates efficient block execution and compels data schedules. Projects destined for Saudi Arabia and Thailand are now using the latest software for engineering and commission phases.

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

[Return to Top](#)

Component Block	Type	Device	CD Parameter	Start	End	Exec
REACTOR1-FC111	PCVFF	DVC8000_G		78	130	25
REACTOR1-FC111		DVC8000_G	OUT	105	130	25
REACTOR1-FV112	AI	IGP10_001		0	40	40
REACTOR1-FV112		IGP10_001	OUT	45	70	25
REACTOR1-FV111_HEAT	AO	DVC8000_G		135	220	25
REACTOR1-FV111_HEAT		DVC8000_G	BCALCO	240	285	25
REACTOR1-FV111B_COOL	AO	SP081_001	BCALCO	270	280	25
REACTOR1-FV111B_COOL		SP081_001	BCALCO	265	280	25
REACTOR1-OUTSEL111	UNVFF	DVC8000_G		180	195	25
REACTOR1-OUTSEL111		DVC8000_G	OUT_3	195	195	25
REACTOR1-OUTSEL111		DVC8000_G	OUT_2	130	215	25
REACTOR1-OUTSEL111		DVC8000_G	BHCAL_OUT	215	240	25



MooreHawke fault-tolerant system achieves safe, reliable fieldbus communications



Trunksafe Fault-Tolerant Fieldbus System from MooreHawke, a division of Moore Industries-International Inc., provides a cost-effective, highly reliable strategy for maintaining FOUNDATION fieldbus communications between the fieldbus host and field devices without interruption should a single-point failure, such as an open-circuit or short circuit, occur.

Trunksafe consists of two redundant fieldbus dc power supplies and a specially engineered device coupler to provide a secure fieldbus physical layer. It:

- maintains all process and diagnostic communications without interruption, even if the network cable is broken or shorted;
- is compatible with FOUNDATION fieldbus H1 networks and devices;
- includes physical layer diagnostics that monitor and report open and short circuits, dc power status, and segment noise.

Trunksafe is part of MooreHawke's comprehensive line of fieldbus physical layer options, which includes Trunkguard Fieldbus device couplers and power supplies designed for general purpose, non-incendive, and Zone 1 and Zone 2 areas; and the Routemaster Fieldbus System for intrinsically-safe (IS) applications.

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

[Return to Top](#)

MTL's 'Eco Power' Fieldbus power supply ideal when low power loss is crucial



To support a growing need for battery powered instrumentation in remote locations, MTL Instruments offers a new "Eco Power" fieldbus power supply intended for use in small, battery-powered fieldbus networks.

Sustainable energy sources such as wind and solar power are increasingly being used to operate instrumentation in remote applications such as wellheads and pipeline metering skids. These installations typically consist of a remote terminal unit (RTU) supporting a small number of measuring instruments, and wireless communication back to a central base station. Limited available energy in these areas is giving rise to a new breed of RTUs that are battery powered, some of which also use the latest FOUNDATION fieldbus technology to connect to intelligent instrumentation.

MTL's new F104 unit has lower current consumption than conventional fieldbus power supplies, making it ideal for use where efficiency and low power loss are crucial. This capability is achieved by providing a lower output voltage to the fieldbus network than that provided with conventional fieldbus supplies, thereby eliminating unnecessary power dissipation in the measuring instruments. The supply's output is nevertheless sufficient to support the number of instruments and cable lengths encountered in typical remote applications.

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

[Return to Top](#)

Pepperl+Fuchs offers complete Fieldbus physical layer solutions



In addition to a complete line of Fieldbus power supplies and junction boxes, Pepperl+Fuchs offers a full line of cables and cordsets, surge protection, and wiring accessories. Cordsets are constructed from Type A Fieldbus cables to provide the longest runs and optimize segment performance. Cables have stainless steel coupling nuts and are exposed run (ER) rated to provide maximum protection from physical damage and allow the cable to be run up to 50 ft outside the cable tray.

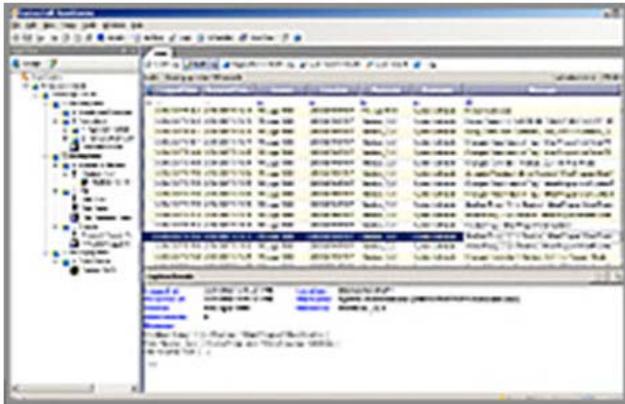
Pepperl+Fuchs also has DIN rail- and transmitter-mounted surge protection devices. Fieldbus surge protection is recommended for any cable run over 10 m to protect devices from lightning and surge damage. DIN rail units feature plug-in protection modules for easy maintenance without disrupting any field wiring. They can be mounted in the control room to protect power supplies and hosts or in field junction boxes to protect field devices and segment protectors. Transmitter-mounted surge protectors simply screw into the transmitter housing to protect the

individual device.

For more information, visit the [Pepperl+Fuchs website](#).

[Return to Top](#)

Rockwell's asset management software features process device configuration



FactoryTalk AssetCentre asset management software from Rockwell Automation includes process device configuration (PDC) using field device tool technology. PDC can help process manufacturers better manage instrumentation, which can lead to increased product quality and system uptime, and easier regulatory reporting compliance.

With FactoryTalk AssetCentre, the engineering staff can remotely connect and conduct instrument diagnostics; view, edit, and print device configurations, and, if need be, quickly swap out or reconfigure devices with the last known good configuration. PDC functionality provides a common asset management platform that works within a multivendor field device environment to drive maintenance and efficiency improvements.

FactoryTalk AssetCentre PDC uses FDT technology to standardize the communication interface between field devices and systems. Because processing facilities rely on a variety of devices, it is important to choose an industry standard that addresses the broadest spectrum of device technologies.

PDC includes device libraries (iDTM) for the HART and FOUNDATION fieldbus communication protocols, making it simple for organizations to take advantage of instrument diagnostic information. The iDTM is based on standardized, device manufacturer-provided Device Descriptions (DDs) of HART and FOUNDATION technology to make possible asset management of any HART and FOUNDATION device.

For more information, visit the [Rockwell Automation website](#).

[Return to Top](#)

Siemens' first 78 GHz radar-level transmitter for solids sets up in minutes



Sitrans LR560 from Siemens Industry Automation Div. is the first radar-level transmitter operating at 78 GHz frequency. A non-contacting 2-wire frequency-modulated continuous-wave radar-level measurement transmitter with a measurement range of 100 m (328 ft), the transmitter emits a narrow 4-deg. beam that avoids silo wall obstructions and other installation interferences to enable installation practically anywhere on the silo top. As the first radar transmitter to operate at a 78-GHz frequency, it emits a short wavelength to provide exceptional signal reflection even from solids with a steep angle of repose. A graphical quick-start wizard helps the user get the device operational in minutes for accurate and reliable level measurement readings without any additional fine tuning.

The Sitrans LR560 is the second radar transmitter released with FOUNDATION fieldbus. The Sitrans LR250 for liquids was released in the summer of 2010. These units join a long line of registered FOUNDATION fieldbus instruments from Siemens that provide level, flow, pressure, temperature, and valve positioning. They include Sitrans P DS III, Sitrans P300, Sitrans TH400, Sitrans F M MAG 6000, Sitrans F M TRANSMAG 2 with Sensor 911/E, Sitrans F C MASS 6000, and SIPART PS2. Siemens' DCS, PCS7, also supports FOUNDATION fieldbus.

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

[Return to Top](#)

Yokogawa's upgraded device management wizard supports Chinese language



Upgraded version of FieldMate R2.03 versatile device management wizard from Yokogawa Electric Corp., released in January, is intended for use in plants and other production-related sites. Its new features include:

- *Support for the Chinese language.* In response to rapid growth in the Chinese market, FieldMate now supports Chinese as well as Japanese and English as a standard feature, positioning the product to capture a larger share of the rapidly growing Chinese market. Support for other languages is planned for the future.
 - *Support of the field wireless communications standard.* The new version of also supports the ISA100.11a field wireless communications standard, which is gaining rapid acceptance in the marketplace. FieldMate's support of all major field communication protocols allows customers to manage a wide variety of devices and select field sensors from different vendors.
- *Free basic version:* Beginning in March 2011, a basic version of FieldMate that includes sensor setting, adjustment, and management functions may be downloaded free from the Yokogawa website.

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

[Return to Top](#)



9005 Mountain Ridge Drive, Bowie Building – Suite 200, Austin, Texas 78759-5316 USA

Tel: 512.794.8890 • Fax: 512.794.8893 • E-mail: info@fieldbus.org

www.fieldbus.org

Follow this link to view the [Fieldbus Facts archive](#) page.

You are receiving this e-mail because you have requested either a newsletter or magazine from CFE Media, LLC.

SUBSCRIBE: [Click here](#) to subscribe to Fieldbus Facts Online, other newsletters, or to change your e-mail address/profile data

UNSUBSCRIBE: To unsubscribe to Fieldbus Facts Online send an e-mail with 'Fieldbus Facts' in the subject line to unsubscribe@cfemedia.com

CONTACT US: Click here for [editorial](#) or [advertising](#) questions.

QUESTIONS: If you have questions or need further assistance, please contact our [Customer Support Staff](#).

PRIVACY: Click here to view our Privacy Policy

Copyright 2011 CFE Media, LLC. All rights reserved.