



Why XNX™ with FOUNDATION® Fieldbus?

Connecting the XNX Gas Monitor to Foundation Fieldbus Speeds Information Flow, Adds Diagnostic Power—Creating a Higher Level of Safety, Productivity and Profitability

One hour of downtime can cost a refinery up to \$250,000 in lost profits, according to one industry source. What's more, a breach in safety can result in millions of dollars spent on disaster recovery, litigation and restoration of a company's reputation. Increasing safety, reducing downtime and keeping operational costs as low as possible are keys to survival in today's competitive market.

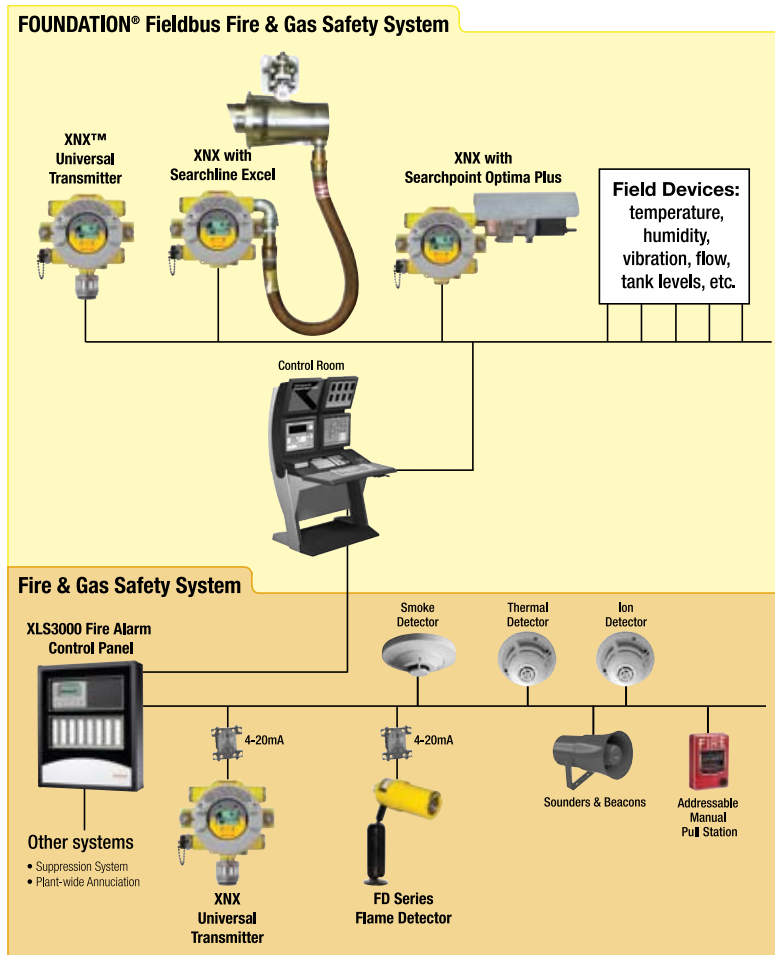
The XNX Universal Gas Monitor and Foundation Fieldbus work hand in glove to help customers control costs, manage operations more effectively and extract the highest value from existing as well as future investments in a gas detection system.

XNX with Foundation Fieldbus yields a wealth of information on gas values in real time, from which the site manager can make better decisions related to safety and business productivity.

XNX integrates with other smart field devices on both Foundation Fieldbus and standard 4-20mA systems. This option gives the site manager ability to run XNX on both systems operating in parallel, where it is desirable to do so (see diagram below). Today's budget-strapped safety manager can obtain a sampling of Foundation Fieldbus's diagnostic power without breaking the budget.

The Industry's Most Advanced Communications System with Gas Detection

XNX enabled, with simultaneous operation of Foundation Fieldbus and 4-20mA systems



XXN™ with FOUNDATION® Fieldbus: Special Technical Merits and Customer Value

XXN offers a true Foundation Fieldbus interoperability tested and registered communication output. By comparison, most competing gas monitoring devices offer a 4-20mA or Modbus to Foundation Fieldbus converter which diminishes the system's diagnostic capabilities by not providing two-way communication.

XXN is the only device on the market that can be configured to run over 4-20mA as well as Foundation Fieldbus. This built-in flexibility serves sites that, for economical or other reasons, may choose to run safety instrumentation on 4-20mA, but also want some of the diagnostic information available through Foundation Fieldbus.

XXN provides detailed Fault and Warning information which can be reviewed via a Foundation Fieldbus network, on the XXN display, a Foundation Fieldbus handheld, or via a SCADA workstation such as Experian by Honeywell. With more detailed fault information, sites can reduce maintenance time and costs. The technician can go to the detector with the needed tools and/or spares to fix it the first time. There is no guesswork, wasted time or extra downtime.

In addition, the Alarm and Fault history provided via a Foundation Fieldbus network enables the operator or safety manager to review calibration dates to ensure compliance with the company's HSE policy. This information from the XXN user menus is viewable at an Experian workstation, any Foundation Fieldbus registered host or Foundation Fieldbus handheld instrument. Using the XXN in tandem with a handheld, for example, can speed the task of calibration and bump testing.

XXN menus include:

- Information: Event History, Gas Information, Temperature, Alarms, Relays
- Test: Force 4-20, Bump test, Alarm & Faults simulations
- Calibration: Span, Zero, Excel Alignment
- Configuration: Alarm, Fault, Gas Sensor, Sensor Type

XXN offers 4-20 mA and Fieldbus interoperability.

Using this feature enables the site to test local audio and visual signals during drills and simulate alarms, or reset and silence latched relays.

XXN with Foundation Fieldbus offers multi-drop advantages.

Depending on the wiring layout, 18 to 32 units can be connected on the same bus. with each device on the bus system requiring only a twisted-wire pair to connect to

the bus; this scheme eliminates the "home-run" design of running wiring from each device separately to a central power source. With Foundation Fieldbus, XXN requires 90% less installation wiring and conduit. Also, the Fieldbus enabled gas monitoring system operates with greater ease and is geared to future needs. Through firmware upgrades, XXN will stave off system obsolescence, future-proofing the design.

The XXN works with other process instrumentation to boost overall plant productivity. Safety engineers, chemists, operators and others working as a team can couple data from the XXN detector with data from process control systems. On the shared Foundation Fieldbus network, fire and gas monitoring systems reside with process automation systems. The systems share the same control network and are able to use common visualization, engineering and asset management tools, while the logic executes separately for each system. system design.

With its modular product design, the XXN can be upgraded easily. Current XXN models in use can be upgraded easily and cost-effectively to Foundation Fieldbus. The upgrade is as simple as attaching an additional circuit board (call 800-538-0363).

About Foundation Fieldbus

Foundation Fieldbus is an open, nonproprietary communication protocol for industrial life safety automation systems in which each device has its own "intelligence" and communicates via an all-digital, two-way communication system. The data is delivered as fast as it is displayed. XXN communicates on the Foundation protocol at 31.25 kbit/second; by comparison, the HART protocol communicates at approximately 1.2 kbit/second.

Foundation Fieldbus Compared to 4-20mA Communications

Differences:

- Supports up to 32 field devices in parallel
- Uses a differential voltage signal
- Requires an impedance characterized power supply
- Requires a terminator at each end

Similarities:

- Uses existing Industry Standard twisted pair wire
- Uses existing Industry Standard terminal blocks
- Uses similar Industry Standard wiring practices
- Meets Intrinsically Safe requirements
- Provides for redundant power supplies

