

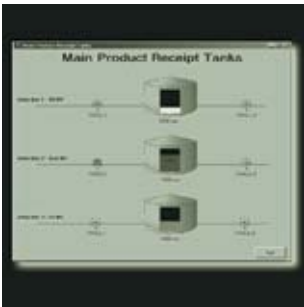


tank farm automation Entis XL





a new direction





in tank farm automation

Entis XL

Entis XL is the latest Windows based, tank farm or terminal automation system from Enraf for installations not needing Weights & Measures approval for custody transfer. The interface looks and feels like any other Windows application and operates on any Windows personal computer.

The operator familiar with the Windows operating environment is able to operate much of the system intuitively.

In order to meet the continuous changes in tank farm and terminal automation operations, Entis XL was designed with an open modular concept. This concept, as compared to traditional SCADA systems, provides the customer with flexibility for customizing a tank farm or terminal automation system.

architecture

Entis XL can accommodate small single tank farms up to large multi-user networked tank farms. Even in cases where more than one brand of gauges is existing, Entis XL offers the right solution for your specific situation.

The system can be connected to a wide variety of different tank gauging technologies via one or more data transmission interface units. The type of field communication interfaces can vary widely from simple RS232 to multi-drop RS485 and digital current loop plus other non-standard type of interfaces.



proto



cols at your choice

available protocols

- Enraf CIU (series 858)
- Enraf CIU Prime
- RS-232
- RS-485
- RS-422
- FIU (Saab)
- WM500 and WM550 (Whessoe)
- 4000 and 2900I (Motherwell)

Datacon

The Datacon unit performs the role of a serial data concentrator and protocol converter. It is configured to continuously poll all the tank gauges connected to its various serial communication ports, collecting current product, level, temperature and status data for storage into a local database.

Entis XL is configured to continuously poll the Datacon unit for current data of all tanks.

features

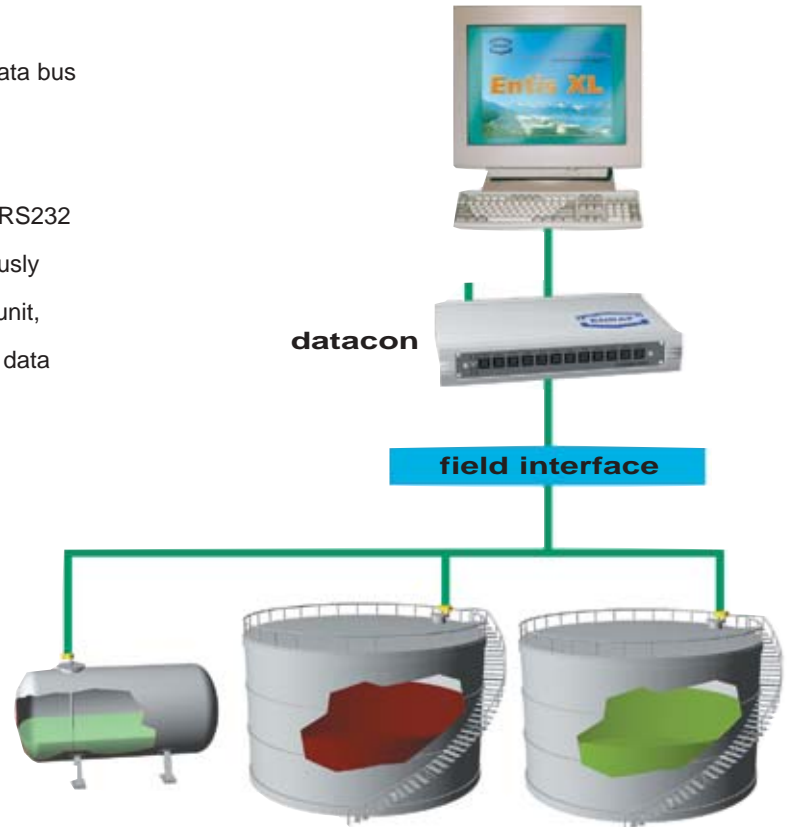
- Multiple 'Views'
- Tank and product 'Grouping'
- On-line tank and data 'Configuration'
- Real-time and historical 'Trending'
- Hardware and software 'Alarm Configuration'
- Gauge 'Commands'
- On-line unit 'Change Dimensions'
- Product 'Transfer' and 'Receipt Programs' with 'Stock accounting' functions
- 'Report Generation'
- 'Dynamic Groups'
- 'Gauge Alarm Setpoints'
- 'Two Gauges' per tank
- 'Product Totalizer'
- User customized 'Views'

layout

small tank farm solution

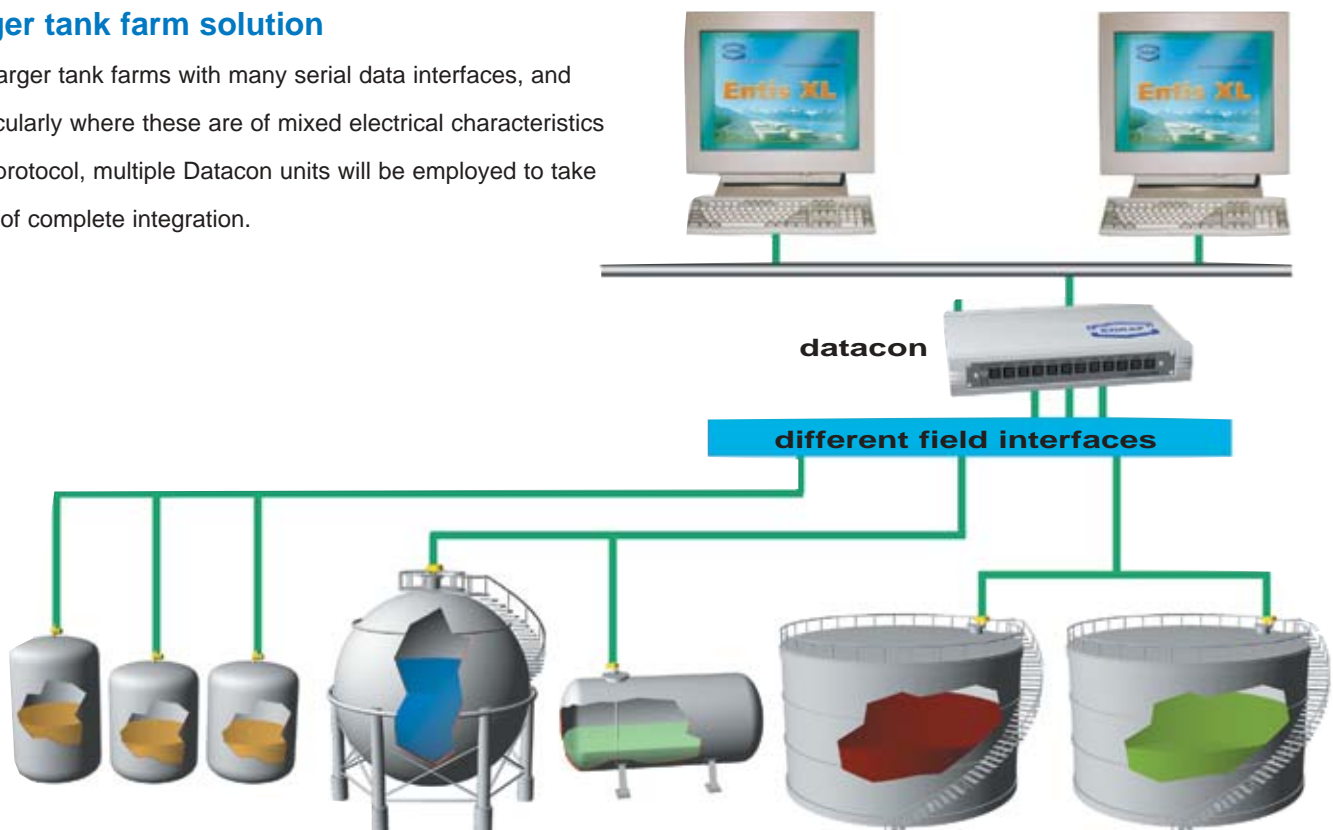
Generally, in small tank farms typically only one serial data bus is present. Several interface protocols are available.

The Datacon unit connects to one of the PC's standard RS232 communication ports. Entis XL is configured to continuously poll each of the tank gauges connected to the Datacon unit, collecting current product level, temperature, and status data for display to the users of the system.



larger tank farm solution

For larger tank farms with many serial data interfaces, and particularly where these are of mixed electrical characteristics and protocol, multiple Datacon units will be employed to take care of complete integration.



Making precision instruments has been an daily task at Enraf since 1925.

During the last forty-plus years, we have provided excellent solutions for bulk-storage tank gauging. Whether your tank is spherical or cylindrical, fixed roof or floating-roof, we've got the solution. Whether you're storing petroleum products or chemicals, we've got the inventory system that you can rely on. Thanks to fast and powerful data-acquisition and process software, our customers can monitor their complete tank farm inventory from a standard PC in the control room. Why do we build such long-lasting equipment? Because our reputation depends on top quality. Our installations have stood the test of time in both the intense heat of the Middle East and the extreme cold of the arctic.

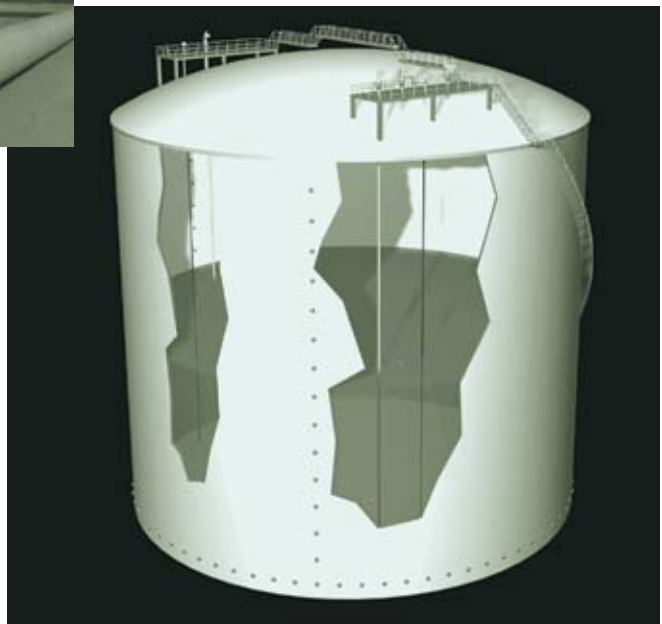
But there is more.

Our presence in petroleum tank farms and terminals convinced us we could do a lot more in supplying you with other products and services. Offerings with just one common goal in mind: to help you manage your tank farm business better.

The Enraf Recogen petroleum terminal vapour recovery unit is a perfect example of this goal. Safeguarding the environment against costly leaks is another facet of Enraf's role as a solutions provider. Enraf's advanced LNG storage technology is a new tool to enable optimal safety and control when storing LNG. To find out more call your local Enraf branch office or representative or visit our website at <http://www.enraf.com>



The Enraf Recogen Unit



LNG storage technology



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WE THINK TANK

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