

## Emerson Process Gas Analyzers with FOUNDATION™ fieldbus Provide Enhanced Field Level Control and Device Interoperability

FOUNDATION™ fieldbus is an all-digital, serial, two-way communications system that interconnects measurement and control equipment such as analyzers, sensors, actuators and controllers. Driven by end-users in manufacturing who desire to move away from older, more centralized plant control strategies, FOUNDATION™ fieldbus provides users with the ability to have true device interoperability, enhanced field level control, and reduced overall installation costs.

At the base level in the hierarchy of plant networks, it serves as a Local Area Network (LAN) for instruments used in process control and manufacturing automation applications and has a built-in capability to distribute the control application across the network.

Emerson Process Management offers extractive process gas analyzers equipped with FOUNDATION™ fieldbus capabilities with Rosemount Analytical MLT 1 and MLT 2 process gas analyzers. The MLT 1 and MLT 2 analyzers provide digital communications with other integrated systems, offering remote diagnostics, control capabilities, and data visualization through DeltaV™ or other host systems. Enhance productivity with built-in easy-to-use tools that transmit compositional and status information about individual analyzers by providing accurate measurements that can be validated.

With up to 64 diagnostic alarms available and a part of Emerson's PlantWeb™ Architecture (optional), the MLT 1 or MLT 2 gas analyzers can help identify potential device problems before they affect the gas processing by creating alerts to notify operators of any abnormal situation prevention opportunities.

To view a complete list of capabilities, applications and specifications for the MLT 1 and MLT 2 process gas analyzers, please visit [www.RosemountAnalytical.com](http://www.RosemountAnalytical.com)



MLT 1 Gas Analyzer



MLT 2 Gas Analyzer



### FOUNDATION™ fieldbus Features for the MLT 1 and MLT 2 Gas Analyzers

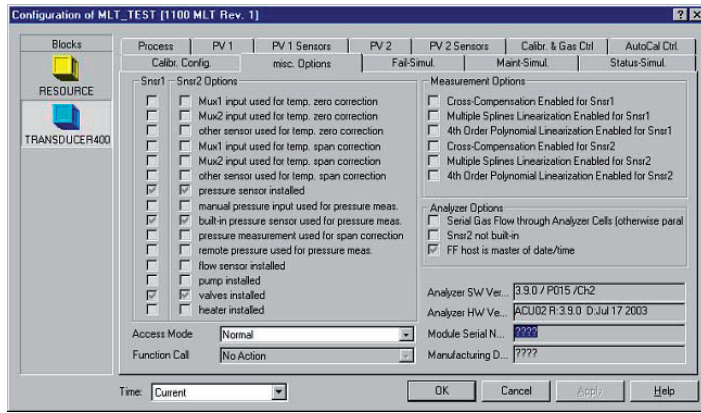
- FOUNDATION™ fieldbus certified acc. to ITC 4.01
- Data visualization and acquisition systems: DeltaV or other host systems
- Remote control process gas analyzers
- Remote diagnostics and prevention alerts
- Support function blocks include AI, AO, PID, ISEL and ARTHM
- Three to five AI blocks support primary variables and secondary parameters for sensors being included, such as flow control or pressure sensors
- One to two AO blocks for external pressure compensation

# FOUNDATION™ fieldbus Functionality for the MLT 1 and MLT 2 Gas Analyzers

Configuration of a FOUNDATION™ fieldbus MLT series analyzer displays all sensor and measurement options available, including:

- Temperature sensors
- Pressure sensors
- Flow sensors
- Calibration valves
- Heater and thermal controls
- Tubing in parallel or series
- Linearization method
- Cross interface compensation

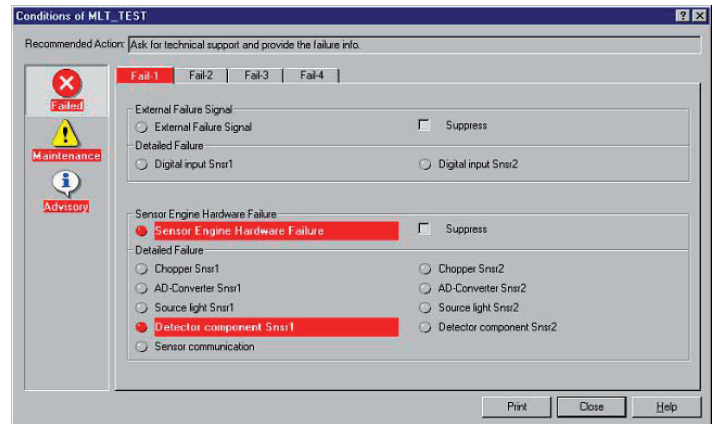
Figure 1 - FOUNDATION™ fieldbus Configuration



FOUNDATION™ fieldbus provides maintenance information and alerts in the transducer block:

- Zero calibration deviations
- Span calibration deviations
- Noise during zero calibration
- Noise during span calibration

Figure 2 - FOUNDATION™ fieldbus Maintenance Alerts



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## EUROPE

**Emerson Process Management**  
 GmbH & Co. OHG  
 Rosemount Analytical  
 Analytical Center of Excellence  
 Industriestrasse 1  
 63594 Hasselroth, Germany  
 T +49 6055 884 0  
 F +49 6055 884 209  
[pga.info@emerson.com](mailto:pga.info@emerson.com)



## ASIA-PACIFIC

**Emerson Process Management**  
 Asia Pacific Private Limited  
 1 Pandan Crescent  
 Singapore 128461  
 Republic of Singapore  
 T +65 6 777 8211  
 F +65 6 777 0947  
[analytical@ap.emersonprocess.com](mailto:analytical@ap.emersonprocess.com)

## MIDDLE EAST AND AFRICA

**Emerson Process Management**  
 Emerson FZE  
 P.O Box 17033  
 Jebel Ali Free Zone  
 Dubai, United Arab Emirates  
 T +971 4 811 8100  
 F +971 4 886 5465  
[analytical@ap.emersonprocess.com](mailto:analytical@ap.emersonprocess.com)

## AMERICAS

**Emerson Process Management**  
 Rosemount Analytical  
 Analytical Center of Excellence  
 10241 West Little York, Suite 200  
 Houston, TX 77040 USA  
 Toll Free 866 422 3683  
 T +1 713 396 8880 (North America)  
 T +1 713 396 8759 (Latin America)  
 F +1 713 466 8175  
[gc.csc@emerson.com](mailto:gc.csc@emerson.com)

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