

A blurred photograph of a modern office hallway with large glass windows and a central revolving door. Several people in business attire are walking through the hallway, their figures slightly out of focus to convey a sense of activity and movement.

**SIEMENS**

Siemens Industry, Inc / IA / Process Instruments

# Level Measurement Products Ultrasonic Level Products

## SITRANS Probe LU

### The extremely experienced SITRANS Probe LU

- Significant redesign and enhancement of The Probe
- Not only available with ultrasonic technology but.....



## SITRANS Probe LU / LR

### The extremely experienced SITRANS Probe LR

- It is available with radar too!
- Radar technology offered for applications beyond traditional ultrasonic level measurement
- This new Probe is applied to applications with volatile fumes, vacuum, pressure, CO<sub>2</sub> blankets, temperature gradients, and ranges to 20m (65 ft)
- 1 ½ inch process connection

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## SITRANS Probe LU / LR

### The extremely experienced SITRANS Probes

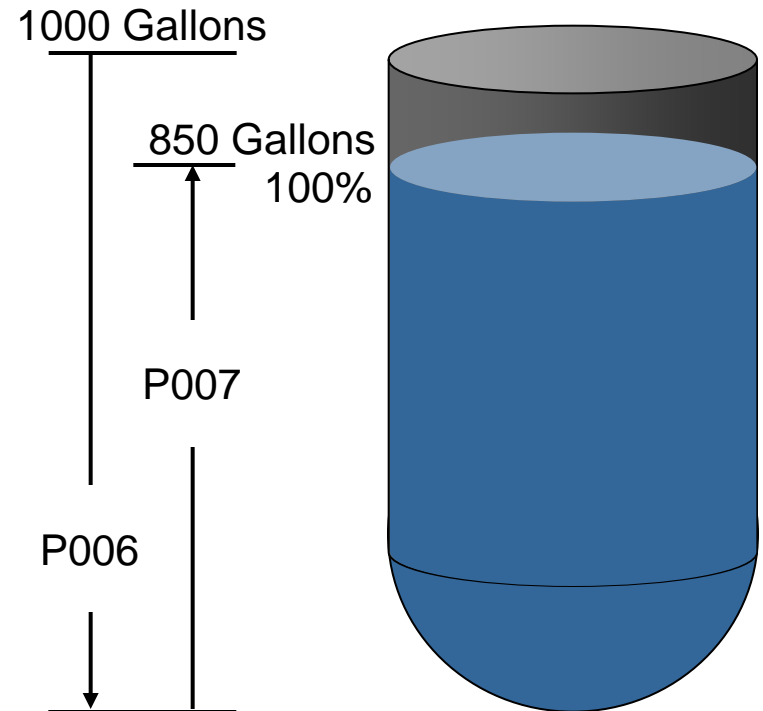
- Three measurement ranges
  - Ultrasonic – 20 ft (6 meters)
  - Ultrasonic – 40 ft (12 meters)
  - Radar – 65 ft (20 meters)
- Two process connections
  - Radar – 1 ½ inch
  - Ultrasonic – 2 inch



# SITRANS Probe LU / LR

## Key Features

- Volume Conversion (liquids only)
- Select the vessel shape
- Enter the vessel volume
- Any volumetric unit can be chosen
- Defaults to 100 (%)



# SITRANS LUT400

## The world's most accurate ultrasonic level controller



- Three models to match your application needs
  - LUT420 Level and Volume Controller
  - LUT430 Level, Volume, Pump, and Flow controller
  - LUT440 High Accuracy Open Channel Monitor (OCM)
- High Accuracy Version – SITRANS LUT440
  - $\pm 1$  mm (0.04”) accuracy within 3 meters for precise open channel flow monitoring
  - Requires XRS-5 Transducer and TS3 Temperature Sensor
- Standard Accuracy – All Models
  - $\pm 1$  mm + 0.17% of measured distance up to 60 meters!

Accuracy means greater control of your process.

# SITRANS LUT400

Standard Mounting Offering includes:

Wall



Pipe

(vertical & horizontal)



DIN Rail

(35mm-7/15)



Optional: Panel Mount allows for remote display up to 16 feet (5M) from the electronics

# SITRANS LUT400

Level measurement in less than a minute!  
Local programming has never be easier or faster!

Four button Local User Interface with backlit Display

Quick Start Wizards guide you through the programming process

Multi-language, text based, menu driven programming





# SITRANS LUT400

## Next Generation Sonic Intelligence

### Patented digital receiver

- High measurement resolution, extensive signal detail, low noise, world's best ultrasonic accuracy

### Enhanced filters

- Excellent performance reliability in the toughest applications
  - Adapts to changing process conditions
  - Continuously evaluates and adjusts for:
    - Noise level and noise characteristics
    - Echo strength
    - Confidence

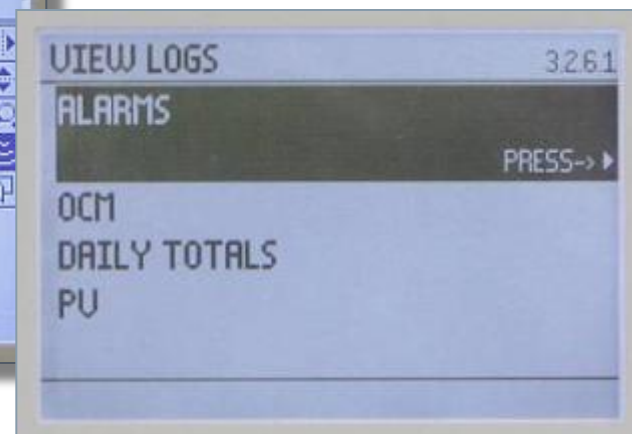
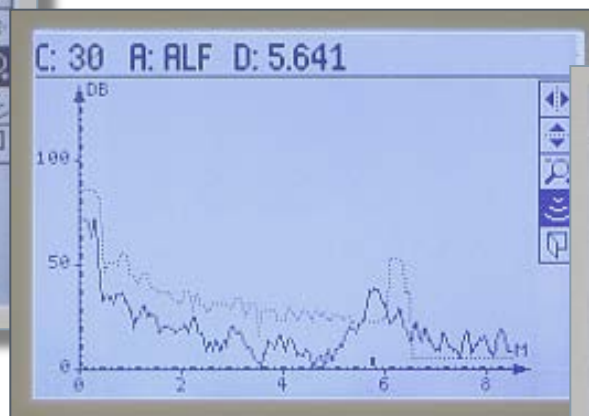


SITRANS LUT400 reacts to changing process conditions, ensuring the best performance

## SITRANS LUT400

### Advanced Diagnostics

- Echo profile and trend views on the display
- New Figure of Merit (FOM) parameter evaluates extended performance, not just point in time
- False Echo Suppression tunes echo thresholds to ignore obstructions
- Integrated data logger allows you to review historic performance



# SITRANS LUT400

## Communications convenience

The controller with HART

- Full set of Electronic Device Descriptors (EDDs)
  - PDM 6.0.5
  - SITRANS DTM 3.1 (for FDTs like PACTware 4.0)
  - FC375/475
  - AMS 10.5
  - Browser for IE8
- Graphical Wizard support on LUI and most communications tools



## MultiRanger / HydroRanger

### The standard for reliable level control

- Level only controller
  - Level
  - Distance
  - Space
- Multifunctional controller
  - Differential
  - Volume and pumped volume
  - Open channel flow
- Liquids or solids to 50ft (15m)



## MultiRanger / HydroRanger

### The new standard for reliable level control

- SIMATIC PDM for configuration and diagnostics
- On board Modbus RS-232 / RS-485
- Field installable communications
  - Profibus DP
  - Allen-Bradley Remote I/O
  - DeviceNet



# SITRANS LU01 / LU02 / LU10

## Long-Range Level Monitor

- Liquids or solids to 200ft (60m)
- Assignable mA and relay outputs
- Dual stage signal processing
- Improves signal to noise ratio
- Communications options
  - Profibus DP
  - MODBUS - RTU
  - Allen-Bradley Remote I/O



**Review**

- SITRANS Probe LU
  - Simple level
  - Robust design
  - Sonic Intelligence
  
- SITRANS LUT400
  - High Accuracy
  - Robust design
  - Ease of Installation
  - Ease of Commissioning
  - Next Generation Sonic Intelligence

**Review**

- MultiRanger 100/200 and HydroRanger 200
  - Advanced pump controller
  - Sonic Intelligence
  - Advanced Communications
  
- SITRANS LU01, LU02, LU10
  - Long-range liquids and solids applications
  - Sonic intelligence
  - Multiple Channel Options
  - Advanced Communications

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# Ultrasonic Level Products