

SITRANS LUT400

The world's most accurate ultrasonic level controller

SIEMENS



- 1 mm accuracy within 3 meters for precise open channel flow monitoring
- 1 mm + 0.17% of measured distance up to 60 meters!

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)

Accuracy means greater control of your process.

SITRANS LUT400 Features

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- Compact 1/2 DIN Enclosure (146 x 146 x 147mm) for installation in tight locations
- Advanced pump, alarm, and flow control features with three relays
- Digital input for back-up level override from point level devices
- Compatible with Siemens full line of Echomax transducers



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Installation simplicity

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Standard offering includes:

Wall



Pipe

(vertical & horizontal)



DIN Rail

(35mm-7/15)



Optional: Panel Mount allows for remote display up to five meters from the electronics

SITRANS LUT400

Easy to use

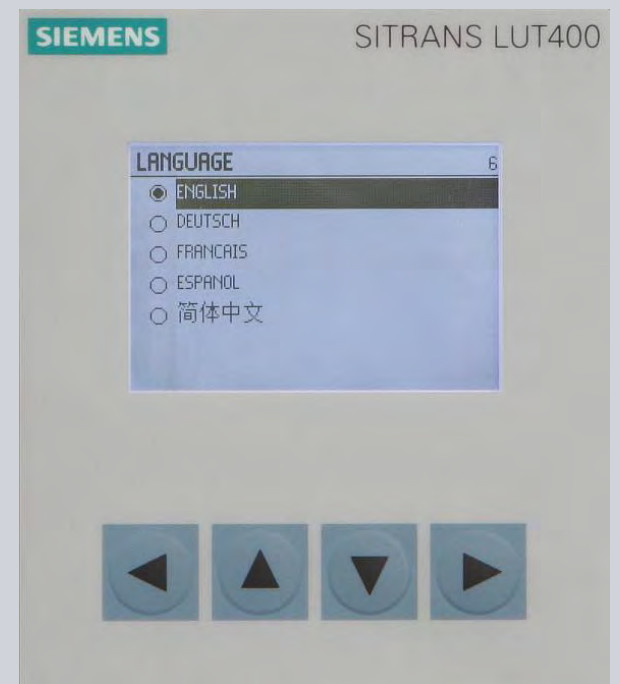
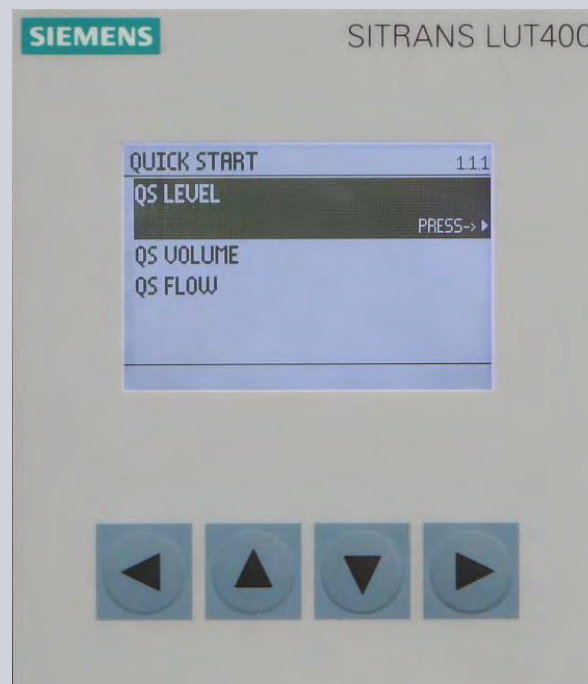
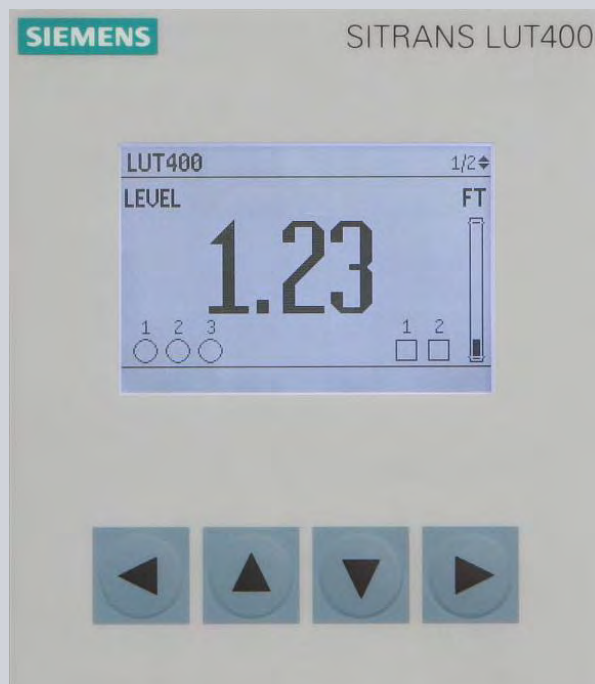


Level measurement in less than a minute!
Local programming has never be easier or faster!

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

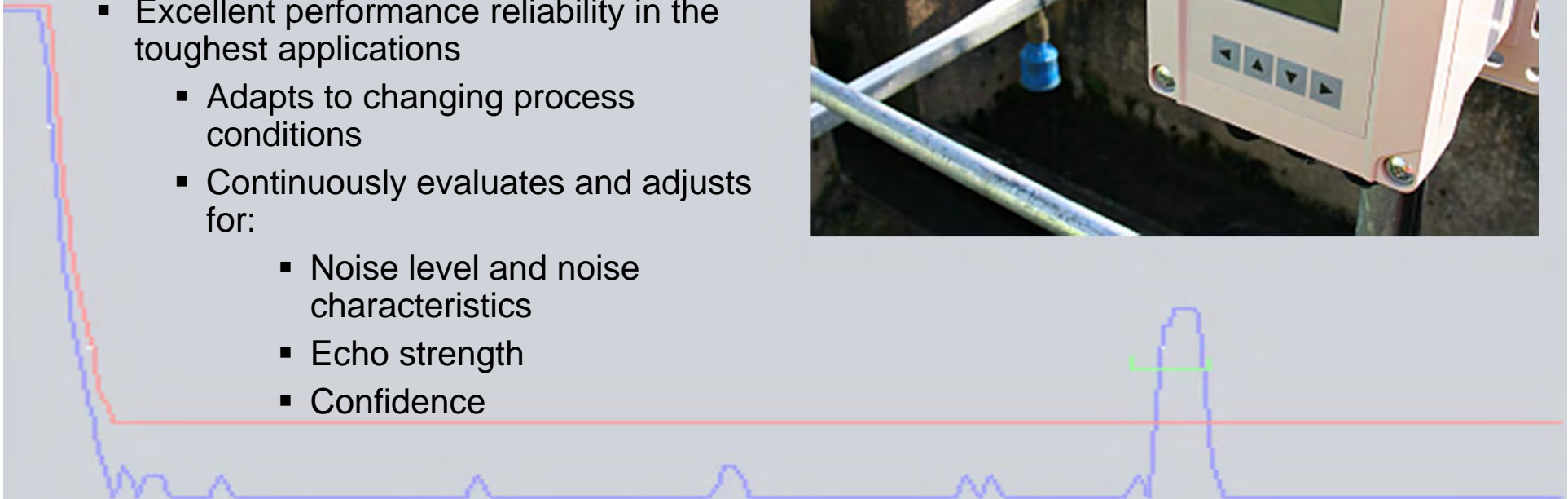
SIEMENS

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

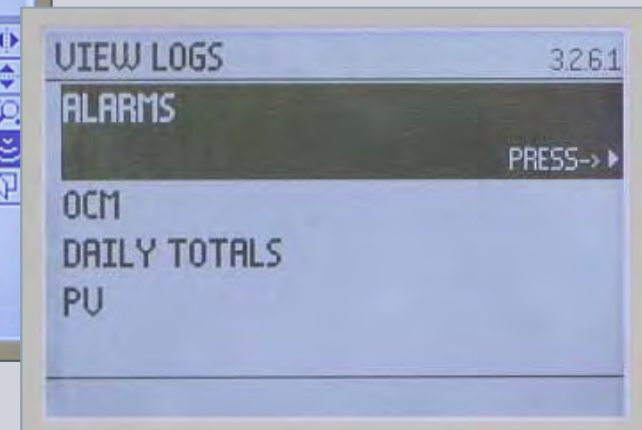
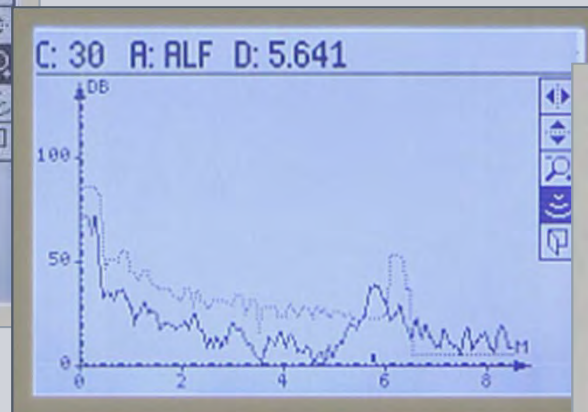
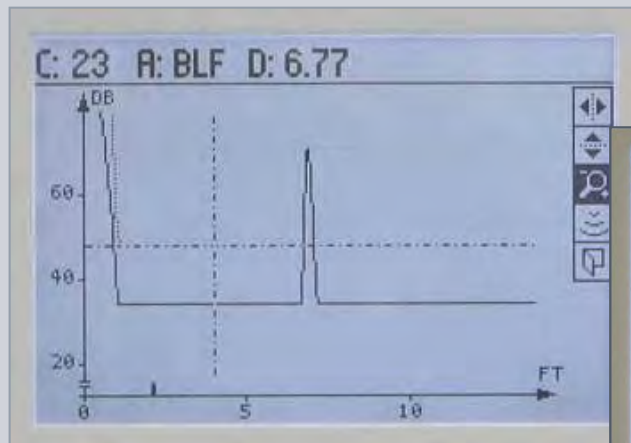
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Next Generation Sonic Intelligence

SIEMENS

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 datalogger allows you to review historic performance



SITRANS LUT400

Communications convenience

SIEMENS

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



SITRANS LUT400 Saves you money

SIEMENS

Reduce operating costs by minimizing pump operation during peak energy periods with SITRANS LUT400's energy saving algorithms

- Immediate return on investment
- Significant operational cost savings



Quick commissioning and ease of use means low start-up and operating costs

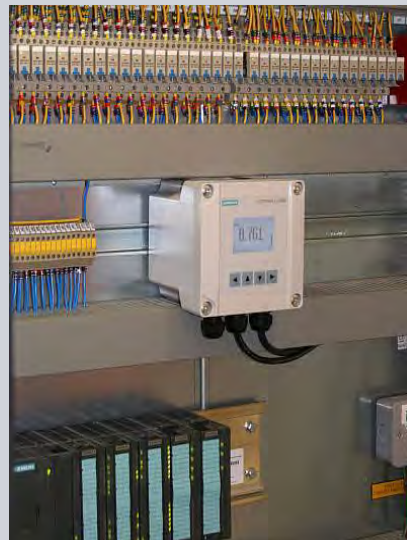
- Low to no maintenance – set it and forget it
- Once installed, the SITRANS LUT400 demands no maintenance, calibration or service, just access the functionality you need

SITRANS LUT400 Applications

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Level, volume, open channel flow,
pump control, storage vessels,
processes, liquids, solids,
slurries...



One device: Endless applications

SITRANS LUT400

Features by model



		SITRANS LUT420	SITRANS LUT430	SITRANS LUT440
Category	Feature	Level controller	Level, pump and flow controller	High accuracy OCM controller
Operations	Level, space, and distance measurement	✓	✓	✓
	Open channel flow measurement		✓	✓
	Volume conversion	✓	✓	✓
Specifications	Compatible with Echomax and ST-H transducers	✓	✓	✓
	Standard accuracy: ± 1 mm +0.17 % of measured distance	✓	✓	✓
	High accuracy: ± 1 mm within 3 meters			✓
	Mounting options: wall or panel, pipe, DIN-rail	✓	✓	✓
Data logging and communications	HART communications	✓	✓	✓
	4 ... 20 mA output (active and passive)	✓	✓	✓
	Integrated datalogger for measurement value and alarms	✓	✓	✓
	Integrated datalogger for fixed rate flow logging		✓	✓
	Integrated datalogger for variable rate flow logging			✓
	Daily data logging for maximum, minimum and average flow, daily totalized volume, and minimum and maximum temperature			✓

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Features by model



Category	Feature	SITRANS LUT420	SITRANS LUT430	SITRANS LUT440
		Level controller	Level, pump and flow controller	High accuracy OCM controller
Flow monitoring	High accuracy open channel flow measurement			✓
	9 digit daily and running flow totalizers		✓	✓
	MCerts			✓
	High and low flowrate alarms		✓	✓
	External totalizer and sampler control		✓	✓
Pump control	Energy saving algorithms for pump control		✓	✓
	Wall cling reduction	✓	✓	✓
	Pump run-on functionality		✓	✓
	Pump start and power resumption delays		✓	✓
	Alternate duty pump routines	✓	✓	✓
	Fixed duty and service ratio pump routines		✓	✓
	Pumped volume totalizer		✓	✓
	Submergence detection	✓	✓	✓
	Discrete input pump interlocks		✓	✓
	Time to spill calculation		✓	✓

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Featuring:

- **Industry leading accuracy** - 1 mm (0.04") accuracy
- **Installation simplicity** – 4 variations for installation
- **Easy to use** – four buttons, Wizard support
- **Quick to configure** - Quick Start Wizards
- **Next Generation Sonic Intelligence** – patented digital receiver and enhanced diagnostics
- **Communications convenience**
- **Saves money** – energy saving algorithms and low to no maintenance