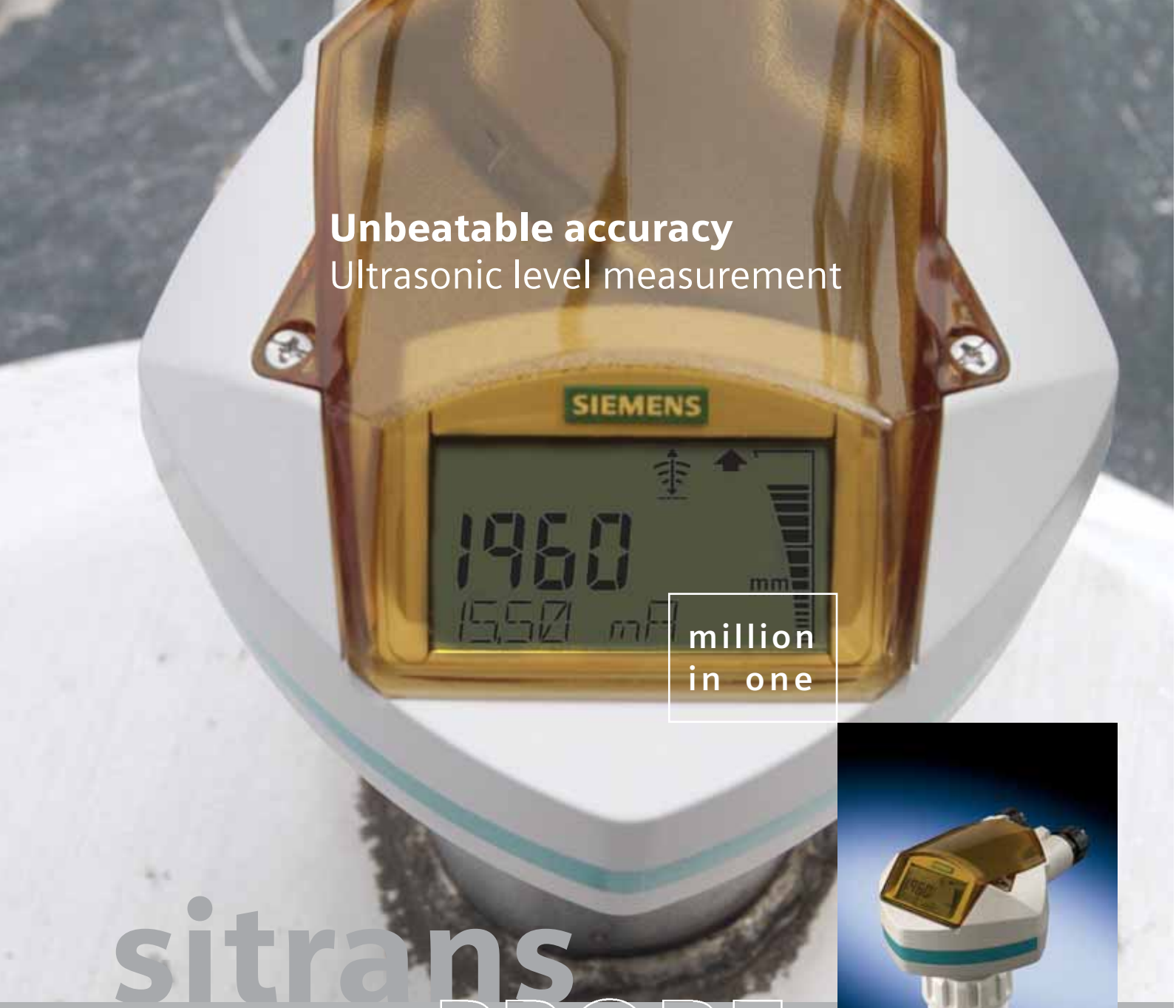
Unbeatable accuracy
Ultrasonic level measurement



sitrans PROBE

With an accuracy of 0.15%, SITRANS® Probe LU sets the standard for precision in ultrasonic level measurement transmitters. SITRANS Probe is the award-winning Milltronics® The Probe – only better. Its improved signal-to-noise ratio results in a longer measurement range, and the patented Sonic Intelligence® echo processing ensures reliability and accuracy.

The ultrasonic SITRANS Probe LU is 2-wire loop powered – ideal for measuring storage vessels, filter beds, and open channels in the water and wastewater, food, and chemical industries.

Backed by the experience of over a million field applications and nineteen patents, SITRANS Probe provides superior functionality and plug-and-play performance. It is now available with HART and PROFIBUS PA communications

SITRANS Probe – million in one.

www.siemens.com/probelu

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Technical specifications

	SITRANS Probe LU
Power	
HART® version	■ Nominal 24 VDC with max. 550 Ω loop resistance ■ Maximum 30 VDC ■ 4 to 20 mA
PROFIBUS PA version	Bus powered, as per IEC 61158-2; 12, 13, 15 or 20mA depending on programming (General Purpose or Intrinsically Safe version)
Performance	
Measurement range	6 m (20 ft) model: 0.25 to 6 m (10" to 20 ft) liquid 12 m (40 ft) model: 0.25 to 12 m (10" to 40 ft) liquid
Accuracy	± the greater of 0.15% of range or 6 mm (0.24")
Repeatability/Resolution	≤ 3 mm (0.12")
Frequency	54 KHz
Update time	HART version: ≤ 5 seconds at 4 mA PROFIBUS PA version: ≤ 4 seconds at 15 mA current loop
Interface	
Display	Built-in alpha-numeric display - visible through transparent lid
Communication	■ HART ■ PROFIBUS PA
Programming	■ Patented infrared handheld programmer ■ SIMATIC® PDM
Outputs	HART version: 4 to 20 mA range, ± 0.02 mA accuracy PROFIBUS PA version: Profile 3, Class B
Mechanical	
Enclosure	■ PBT (polybutylene terephthalate) body ■ PEI (polyether imide) lid ■ Type 4X/NEMA 4X, Type 6/NEMA 6, IP67, IP68 enclosure ■ Cable inlet: 2 x M20 x 1.5 conduit gland or 2 x 1/2" NPT thread
Process connection	■ Threaded connection: 2" NPT, BSP or G/PF ■ Flange connection: 3" (80 mm) universal flange ■ Other connection: FMS 200 mounting bracket
Sensor	Transducer options: ETFE (ethylene-tetrafluouroethylene) or PVDF (polyvinylidene fluoride)
Process conditions	
Ambient temperature	-40 to 80 °C (-40 to 176 °F)
Process temperature	-40 to 85 °C (-40 to 185 °F)
Pressure (vessel)	0.5 bar (7.25 psi g)
Approvals	
	CE, CSA$_{us/c}$, FM, ATEX HART version: Lloyd's Register of Shipping, ABS Type approval

Certification NO. 002284

www.siemens.com/level

SITRANS Probe

2-wire level transmitters

SITRANS® Probe sets the new standard for ultrasonic and radar continuous level measurement. These transmitters offer you superior reliability for level, volume, and flow applications in the water and wastewater, food, chemical, and hydrocarbon processing industries.

SITRANS Probe LU is a 2-wire, loop powered ultrasonic transmitter for level/volume/flow monitoring of liquids and slurries in storage vessels, filter beds, and in open channels. It is ideal for applications in the water and wastewater industry, and for food and chemical storage applications. Its unbeatable accuracy of 0.15% is due to enhancements in the Sonic Intelligence echo processing software that compensate for echo attenuation and noise floor increase. It also features Auto False-Echo Suppression for fixed obstruction avoidance. Both features result in superior accuracy and reliability.

Also available:
SITRANS Probe LR is a 2-wire, 5.8 GHz (6.3 GHz in North America) radar transmitter for level/volume monitoring of liquids and slurries in storage and simple process vessels with chemical vapors, temperature gradients, vacuum or pressure.

Million in one

Signal processing with field experience

Siemens level measurement instruments come with extensive field experience. Siemens Milltronics developed the signal processing technology for level instruments based on the experience of a million instruments in industrial applications.

With this experience we understand the importance of reliability, and we know what it takes to make a trusted and accurate level instrument for demanding applications. That's why our engineers invented Sonic Intelligence and why these instruments carry so many patents. With Siemens Milltronics you get the experience of a million applications in one instrument.

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