Unbeatable accuracy
in ultrasonic level measurement
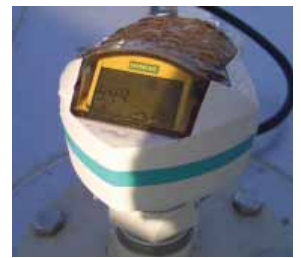
With the reliability of Sonic Intelligence echo processing

SITRANS Probe LU

Answers for industry.

SIEMENS

Unbeatable accuracy

With an accuracy of 0.15%, SITRANS® Probe LU sets the standard for precision in ultrasonic level measurement transmitters. Its high 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 ideal for measuring storage vessels, filter beds, and open channels in the water/wastewater, food, and chemical industries.

- Simple setup and programming with handheld infrared programmer or via PC software

- Sonic Intelligence – our field-proven echo processing algorithms guarantee the most reliable performance available

- Unmatched beam angle – stronger pulse and sensitivity in a compact beam make our ultrasonics transducers the most accurate in the industry

- Million in one – our products have the field experience of over a million points of level built into every device

- Global network – sales and support in your neighborhood. Our extensive global coverage means you get sales and support when and where you need it.

SITRANS Probe LU	
Power	
HART® version	• Nominal 24 V DC with max. 550 Ω loop resistance • Maximum 30 V DC • 4 to 20 mA
PROFIBUS PA version	Bus powered, as per IEC 61158-2; 12, 13, 15, or 20 mA 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 applications • 12 m (40 ft) model: 0.25 to 12 m (10" to 40 ft), liquid applications
Accuracy	± the greater of 0.15% of range or 6 mm (0.24")
Repeatability	≤ 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 • Type 4X/NEMA 4X, Type 6/NEMA 6/IP67/IP68 enclosure • Cable inlet: 2 x M20x1.5 cable gland or 2 x ½" 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 g(7.25 psi g)
Approvals	
	CE, CSA$_{us/c}$, C-Tick, FM, ANZEx, IECEx, ATEX HART version: Lloyd's Register of Shipping, ABS Type approval

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