

# Unbeatable accuracy in ultrasonic level measurement

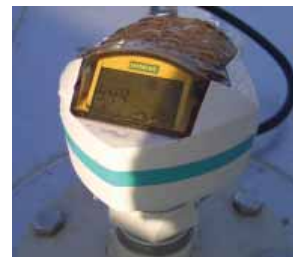
With the reliability of Sonic Intelligence echo processing



## 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

<b>HART® version</b>	<ul style="list-style-type: none"> <li>• Nominal 24 V DC with max. 550 Ω loop resistance</li> <li>• Maximum 30 V DC</li> <li>• 4 to 20 mA</li> </ul>
<b>PROFIBUS PA version</b>	Bus powered, as per IEC 61158-2; 12, 13, 15, or 20 mA depending on programming (General Purpose or Intrinsically Safe version)

#### Performance

<b>Measurement range</b>	<ul style="list-style-type: none"> <li>• 6 m (20 ft) model: 0.25 to 6 m (10" to 20 ft), liquid applications</li> <li>• 12 m (40 ft) model: 0.25 to 12 m (10" to 40 ft), liquid applications</li> </ul>
<b>Accuracy</b>	± the greater of 0.15% of range or 6 mm (0.24")
<b>Repeatability</b>	≤ 3 mm (0.12")
<b>Frequency</b>	54 kHz
<b>Update time</b>	HART version: ≤ 5 seconds at 4 mA PROFIBUS PA version: ≤ 4 seconds at 15 mA current loop

#### Interface

<b>Display</b>	Built-in alpha-numeric display – visible through transparent lid
<b>Communication</b>	<ul style="list-style-type: none"> <li>• HART</li> <li>• PROFIBUS PA</li> </ul>
<b>Programming</b>	<ul style="list-style-type: none"> <li>• Patented infrared handheld programmer</li> <li>• SIMATIC® PDM</li> </ul>
<b>Outputs</b>	HART version: 4 to 20 mA range, ± 0.02 mA accuracy PROFIBUS PA version: Profile 3, Class B

#### Mechanical

<b>Enclosure</b>	<ul style="list-style-type: none"> <li>• PBT (polybutylene terephthalate) body</li> <li>• Type 4X/NEMA 4X, Type 6/NEMA 6/IP67/IP68 enclosure</li> <li>• Cable inlet: 2 x M20x1.5 cable gland or 2 x ½" NPT thread</li> </ul>
<b>Process connection</b>	<ul style="list-style-type: none"> <li>• Threaded connection: 2" NPT, BSP or G/PF</li> <li>• Flange connection: 3" (80 mm) universal flange</li> <li>• Other connection: FMS 200 mounting bracket</li> </ul>
<b>Sensor</b>	Transducer options: ETFE (ethylene tetrafluoroethylene) or PVDF (Polyvinylidene Fluoride)

#### Process conditions

<b>Ambient temperature</b>	-40 to 80 °C (-40 to 176 °F)
<b>Process temperature</b>	-40 to 85 °C (-40 to 185 °F)
<b>Pressure (vessel)</b>	0.5 bar g (7.25 psi g)

#### Approvals

	CE, CSA <sub>us/cr</sub> , C-Tick, FM, ANZEx, IECEx, ATEX HART version: Lloyd's Register of Shipping, ABS Type approval
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