

# Unbeatable accuracy in ultrasonic level measurement

With the reliability of Sonic Intelligence echo processing



## **SITRANS** Probe LU

Answers for industry.





### Unbeatable accuracy

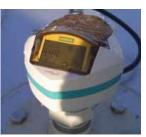
With an accuracy of 0.15%, SITRANS® Probe LU sets the standard for precision in ultrasonic level measurement transmitters. Its high signal-to-noise ratio results in a longer measurement range, and the patented Sonic Intelligence® echo processing ensures reliability and accuracy.

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 fieldproven 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       | <ul> <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>               |
|---------------------|--|
| 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<br>• 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          | <ul> <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> |
|--------------------|--|
| Process connection | <ul> <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>                 |
| 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 <sub>usic</sub> , C-Tick, FM, ANZEx, IECEx, ATEX<br>HART version: Lloyd's Register of Shipping, ABS Type approval |  |
|---|--|
|---|--|

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