

# What is the easiest, most reliable way to measure the level in liquids?

---



SITRANS LR250: 2-wire continuous radar level transmitter for liquid and slurry applications.

Answers for industry.

**SIEMENS**



## Process Intelligence for liquid level measurement

SITRANS LR250 is Siemens 2-wire continuous radar level transmitter for liquid and slurry applications. This radar transmitter is easy to install and quick to configure. With its narrow beam and small antenna, SITRANS LR250 can be installed practically anywhere on your vessel. The graphical user interface and Quick Start Wizard get you operational in minutes. Process Intelligence echo processing ensures reliable dynamic echo evaluation, even on short ranges and low dielectric media. Install the SITRANS LR250 on your liquid application and prepare to be amazed at how easy it is to operate.

SITRANS LR250 is the best solution for your level application. This 2-wire, 25 GHz pulse radar level transmitter continuously monitors liquids and slurries in storage and process vessels including high temperatures and pressure, to a range of 20 m (66 ft). A selection of horns and flanges provide installation choices to fit many applications.

- **Easy to install** – small horn and narrow beam allows installation practically anywhere on your vessel
- **Quick to configure** – Quick Start Wizard guides you during setup
- **Process Intelligence** – advanced echo processing for unparalleled performance
- **Reliable and accurate** – extremely high signal and low noise yields high performance
- **Full vessel capacity** – high accuracy of low and high levels, even with low dielectric media

- **Communication** –
  - HART®
  - PROFIBUS PA
  - Foundation Fieldbus
- **Locally programmed** – with intrinsically safe infrared handheld programmer
- **Remotely programmed** – with SIMATIC PDM, Emerson AMS, or Field Device Tool (Pactware) via SITRANS DTM
- **Local user interface** – graphically displays echo profiles and diagnostic information



### Standard specifications at a glance

<b>Power</b>	Nominal 24 V DC, max 30 V DC
<b>Measurement range*</b>	0.05 to 20 m (2" to 66 ft)
<b>Non-repeatability</b>	3 mm (0.0118")
<b>Frequency</b>	25 GHz (k-band)
<b>Dielectric constant</b>	>1.6, horn and application dependent
<b>Analog output</b>	4 to 20 mA
<b>Display (local)</b>	Graphic local user interface including Quick Start Wizard and echo profiles
<b>Communication</b>	<ul style="list-style-type: none"> <li>• HART</li> <li>• PROFIBUS PA</li> <li>• Foundation Fieldbus</li> </ul>
<b>Programming</b>	<ul style="list-style-type: none"> <li>• SIMATIC PDM</li> <li>• Intrinsically safe infrared handheld programmer (local operation)</li> </ul>
<b>Enclosure</b>	<ul style="list-style-type: none"> <li>• Construction: die-cast aluminum, polyester powder-coated</li> <li>• Ingress protection: Type 4X/NEMA 4X, Type 6/NEMA 6, IP67, IP68</li> <li>• Cable inlet: M20x1.5 or ½" NPT (qty 2)</li> </ul>
<b>Process connections**</b>	1½" or 2" NPT (ASME 1.20.1), BSPT (EN10226-1), or G (BS EN ISO 228-1)
<b>Horn antenna</b>	<ul style="list-style-type: none"> <li>• 1.5" (40 mm), 2" (48 mm), 3" (75 mm), 4" (100 mm) nominal</li> <li>• 4" (100 mm) optional horn extension</li> <li>• Stainless steel 316L/1.4404 or 316L/1.4435 [optional alloy N06022/2.4602 (Hastelloy® C-22® or equivalent)]</li> </ul>
<b>Ambient temperature***</b>	-40 to 80 °C (-40 to 176 °F)
<b>Process temperature***</b>	-40 to 200 °C (-40 to 392 °F) at process connection with FKM O-ring
<b>Pressure (vessel)***</b>	40 bar g (580 psi g) max., temperature and process connection type dependent
<b>Approvals</b>	CSA <sub>US/CA</sub> , CE, FM, NE 21, NE 43, C-TICK, European Radio (R&TTE), Industry Canada, FCC, ATEX, SIL-2, GOST, INMETRO, IECEx

\* Reference conditions according to IEC 60770-1

\*\*Other process connections are available by special request.

\*\*\* For applications beyond these specifications, custom configured units are available: contact your local representative.

Specifications are subject to change without notice.

HART is a registered trademark of the HART Communication Foundation. Hastelloy and C-22 are registered trademarks of Haynes International Inc. SIMATIC PDM and SITRANS are registered trademarks of Siemens AG.

## Get more information

[www.siemens.com/SITRANSLR250](http://www.siemens.com/SITRANSLR250)

Siemens AG  
Industry Sector  
Sensors and Communication  
76181 KARLSRUHE  
GERMANY

[www.siemens.com/processautomation](http://www.siemens.com/processautomation)

Subject to change without prior notice  
7ML1996-5LH03  
© Siemens AG 2012

The information provided in this brochure contains merely general descriptions or characteristics of performance which in case of actual use do not always apply as described or which may change as a result of further development of the products. An obligation to provide the respective characteristics shall only exist if expressly agreed in the terms of the contract.

All product designations may be trademarks or product names of Siemens AG or supplier companies whose use by third parties for their own purposes violate the rights of the owners.