



Complex application – simple solution

Guided wave radar level transmitters



sitrans lg200

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SITRANS LG200

SITRANS LG200 is an advanced loop-powered, guided wave radar level transmitter for liquids, slurries, interface, and bulk solids with a dielectric constant (dK) range of 1.4 and higher. The wide selection of models and the echo processing software ensure reliable measurement in liquids with corrosive vapors, foam, saturated steam, high viscosity, surface agitation, high fill/empty rates, and varying dielectric or density. We have a perfect match for all of your applications – just to keep level simple.

- Dependable performance – unaffected by change in density and dielectric properties
- Low dielectric measurement – accurately measures materials with a dielectric constant (dK) range of 1.4 and higher
- Extreme conditions – measures in applications from -195 to 427 °C (-320 to 800 °F) and from full vacuum to 431 bar g (6250 psi g)
- Reliable measurement – accurate to 2.5 mm (0.1")
- Extended insertion length – probe lengths up to 22.5 m (75 ft)
- Hazardous approvals – Intrinsically Safe, Explosion proof, and Non-Incendive approvals
- Easy setup – push button configuration or HART® communications

SITRANS LG200

Power

11 to 36 V DC

Performance

Measurement range	Up to 22.5 m (75 ft)
Non-linearity	<ul style="list-style-type: none"> • Coaxial/Twin rod probes: <0.1% of probe length or 2.5 mm (0.1"), whichever is greater • Single rod probes: <0.3% of probe length or 8 mm (0.3"), whichever is greater • Interface models: <12.7 mm (0.5")
Measured error	<ul style="list-style-type: none"> • Coaxial/Twin Rod probes: ±0.1% of probe length or 2.5 mm (0.1"), whichever is greater • Single Rod probes: ±0.5% of probe length or 12.7 mm (0.5"), whichever is greater • Interface models: Upper layer: ±25.4 mm (1"); Interface layer: ±25.4 mm (1") (clean distinct interface required)
Resolution	±2.5 mm (0.1")
Repeatability	<2.5 mm (0.1")
Hysteresis	<2.5 mm (0.1")

Interface

Output	4 to 20 mA with HART digital signal
Communication	HART
Programming	Local – Three button, menu-driven data entry with security Remote – SIMATIC PDM via HART

Mechanical

Enclosure	<ul style="list-style-type: none"> • Construction: aluminum, epoxy-coated • Ingress protection: Type 4/NEMA 4, IP65 • Cable inlet: 2 x M20x1.5 or 2 x ½" NPT
Process connections	Probe dependent; please refer to instruction manual

Probe types*

Coaxial probes	Interface, low dK liquids, steam, high temperature/pressure, overfill
Single rod probes	High temperature/high pressure, solids (flexible rod), high dK liquids, corrosive liquids (PFA coated), buildup, sanitary
Twin rod probes	Low dK liquids ≥ 1.9, solids (flexible twin rod), light buildup, corrosives (Hastelloy® C or Monel® twin rigid rod only)

Process conditions

Ambient temperature	-40 to 80 °C (-40 to 176 °F)
Process temperature	-195 °C to 427 °C (-320 °F to 800 °F); probe and pressure dependent
Pressure (vessel)	Full vacuum to 431 bar g (6250 psi g); probe and temperature dependent

Approvals

General	CSA _{us/cr} , CE, FM, C-TICK
Hazardous areas	CSA, FM, ATEX

* Standard probe offering is stainless steel 316L. Other options are available depending on probe type. HART is a registered trademark of the HART Communication Foundation. SITRANS and SIMATIC are registered trademarks of Siemens AG. Hastelloy is a registered trademark of Haynes International Inc. Monel is a registered trademark of Special Metals Corporation. Specifications are subject to change without notice.
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