Process Intelligence
for solids level measurement

SITRANS LR 460

- 24 GHz FMCW 4-wire radar transmitter
- Process Intelligence, advanced echo processing for unparalleled performance
- High frequency radar provides excellent reflection from solids
- Extremely high signal yields high performance (high signal-to-noise ratio)
- Virtually unaffected by dust or temperature changes
- For long range continuous measurement of solids to 100 m (328 ft)
- Integrated Easy Aimer for optimizing signal on sloped surfaces
- Quick Start Wizard for fast simple setup
- Infrared handheld programmer for local operation

sitrans LR 460

SITRANS LR 460 is the continuous radar level transmitter for your tough solids applications, including materials with severe dust, high temperatures and long ranges to 100 m (328 ft). Built-in Process Intelligence echo processing ensures reliable dynamic echo evaluation of challenging solids applications. Unparalleled signal amplitude gives reliable readings on long ranges, sloped surfaces, and low dielectric media. Choose the SITRANS LR 460 for your tough solids application and benefit from Process Intelligence firsthand.

www.siemens.com/radar

million in one

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Technical specifications

	SITRANS LR 460
Power	
	■ 100 to 230 V AC ± 15%, 50/60 Hz, 6W (12 VA) or ■ 24 V DC, +25/-20%, 6W (optional)
Performance*	
Measurement range	0.35 to 100 m (1.15 to 328 ft)
Accuracy	greater of 25 mm (1") or 0.25% of span
Non-repeatability	≤10 mm (0.4")
Frequency	24.2 to 25.2 GHz FMCW
Dielectric constant	>1.4
Interface	
Analog output	Optically isolated 4 to 20 mA, 600 Ω max.
Display (local)	Alphanumeric LCD for readout and entry
Communications/ programming	■ HART® (PROFIBUS PA optional**) ■ SIMATIC PDM ■ Intrinsically safe infrared handheld programmer (local operation)
Mechanical	
Enclosure	■ Construction: die-cast aluminum, polyester powder-coated ■ Ingress protection: IP67/Type 4X/NEMA 4X/Type 6/NEMA 6 ■ Cable inlet: M20x1.5 or 1/2" NPT (qty 2)
Process connections***	Universal: 3"/80 mm, 4"/100 mm, 6"/150 mm with integral Easy Aimer, ball swivel type, 316L stainless steel (mates with flange EN 1092-1, ASME B16.5, or JIS B2238 bolt pattern)
Horn antenna (stainless steel, PTFE emitter)	■ 3" or 4" diameter horn ■ Purge 1/8" NPT connection (optional) ■ PTFE dust cover (optional)
Process Conditions******	
Ambient temperature	-40 to 65 °C (-40 to 149 °F)
Process temperature	-40 to 200 °C (-40 to 392 °F)
Pressure (vessel)	0.5 bar g (7.25 psi g) max.
Approvals	
General	$CSA_{us/c}$, CE, FM
Radio	European Radio (R&TTE), Industry Canada, FCC
Hazardous areas	CSA/FM Class II, Div. 1, Groups E, F and G, Class III, ATEX II 1D, 1/2D, 2D T85°C

* Reference conditions according to IEC 60770-1
** Contact your representative for availability.
***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.

Certification NO. 002284

Million in one

Signal processing with field experience

Siemens level measurement instruments come with extensive field experience. Siemens developed the signal processing technology for level instruments based on the experience of a million instruments in industrial applications.

With this experience, we understand the importance of reliability, and we know what it takes to make a trusted and accurate instrument for demanding applications. That's why our engineers invented Process Intelligence, Sonic Intelligence® and Auto False-Echo Processing, and that's why these instruments carry so many patents. With Siemens you get the experience of a million applications in one instrument.

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