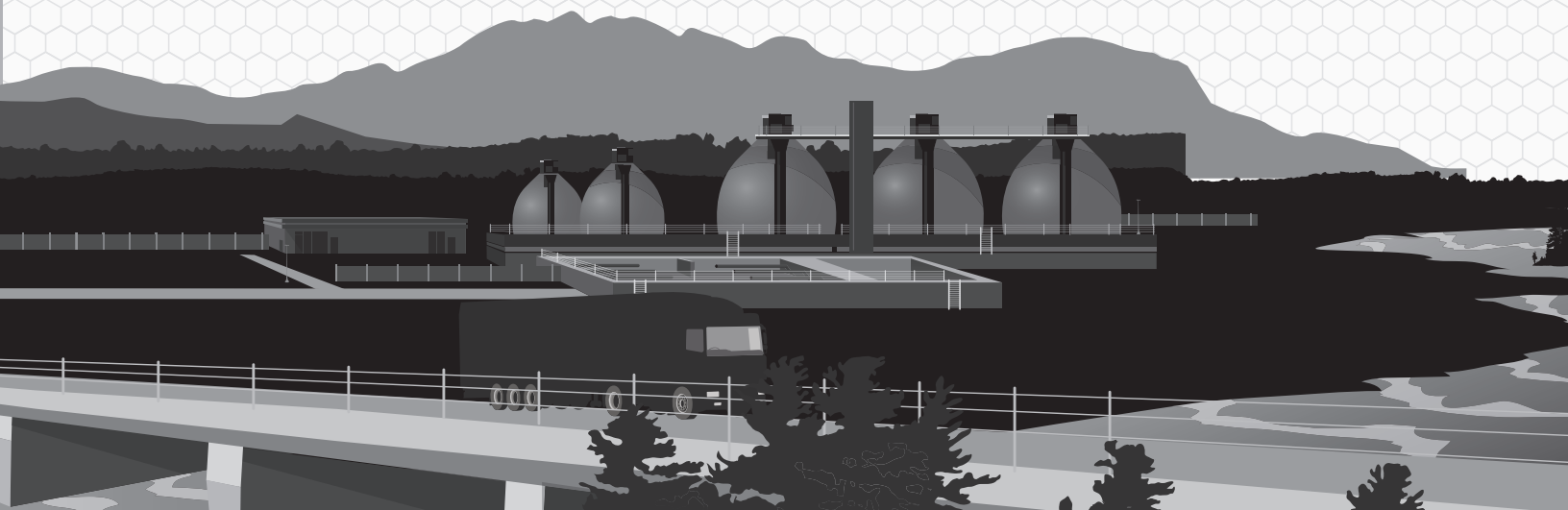


FLUID LEVEL MEASUREMENT TRUSENSE S300 SERIES

- + Sensor Optimized for Fluids
- + Accurate and Reliable Measurements
- + Key Advantages of Lasers



www.lasertech.com

 **LASER^{TECH}**
Measurably Superior®

The Ultimate Sensor Engineered to Measure Fluids without Contact

After years of research and development, LTI has engineered the ultimate non-contact fluid measurement sensor specifically designed to directly measure fluids that are highly reflective, turbulent and with any dielectric properties.



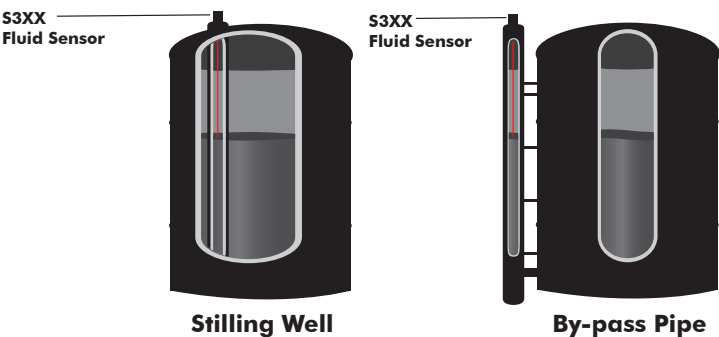
TruSense® S-300 Series:

- Outputs data in 4-20 mA, SDI-12, and RS232 formats
- Produces accurate results over long ranges
- Aligns the transmit/send lens with a built-in laser pointer
- Expanded SDI-12 command sets allows for complete configuration and adjustments remotely

Feature Cased & OEM versions	Visible Alignment Laser	RS-232	4-20/MA	Input/Output Trigger	SDI-12
S-300		✓		✓	✓
S-310	✓	✓		✓	✓
S-330	✓	✓	✓		

Accurate and Repeatable Results

- Capable of generating accurate measurements on highly reflective surfaces, such as clear water
- Generates reliable results by stabilizing the reflections picked up by the receiver
- Collects consistent data by smoothing out the reflective peaks and valleys caused by fluids in random motion



The S300-series can also be used with simple stilling wells and by-pass pipes to measure fluids.

Advantages Like No Other

- Provides instantaneous measurements that are very accurate, even over long ranges
- Avoids false echoes by creating a beam with virtually no spread that can be shot through narrow spaces or small-diameter stilling wells
- Provides a sensor that can be shot through protective screens and near flat walls
- Installs at the top of a well for easy mounting, access and maintenance
- Saves time with little to no required calibrations

	Laser	Ultrasound	Radar
High Accuracy	✓		✓
Used in Stilling Pipes	✓		
Used in Narrow Spaces or Next to Walls	✓		
Wide Temp Ranges	✓		✓
Ease of Installation	✓		
Low Cost	✓	✓	

Ideal Applications and Industries



WATER AND WASTEWATER

Accurately measure water levels in narrow spaces or next to walls whether the water is clear, translucent, or opaque, and with or without suspended particles.



CHEMICALS PROCESSING

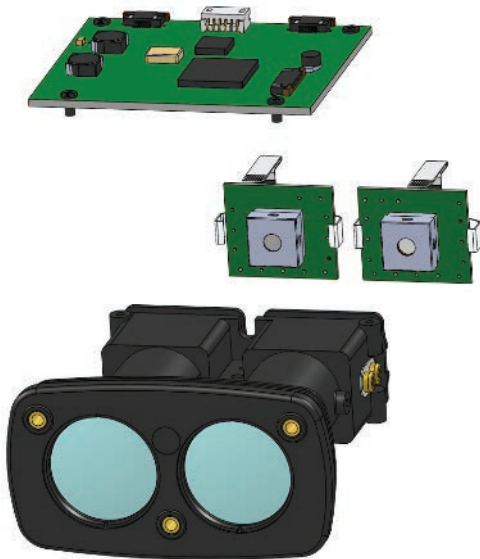
Work across a wide range of temperatures, and is independent of material properties and dielectric constants, with an IS-rated ruggedized enclosure.

Simple Set Up & Configuration

The S300- series comes fully configured and ready for use in most applications. A number of commands are available to optimize the sensor to specific conditions.

Systems Integrator Friendly

For Systems Integrators and OEMs, the S300-series comes in an OEM version that can be built into another device.



CAD files and integration support are available to assist you in integrating the S300-series sensor into your application for maximum performance.



Demo Program

Pre-qualified system integrators and end-users can have an opportunity to test a TruSense laser to confirm that LTI's pulse laser technology works in their specific application. Ask an LTI representative about our demo program.



Diffuser Lens

Use the optional diffuser lens to obtain accurate measurements directly to clear or turbulent liquids



Sensor Website

measuringthefuture.com/sen

Videos

[TruSense® S300 Series:
The Ultimate Fluid Measurement Sensor](#)

- www.youtube.com/watch?v=2DO2o8rG9Xw

[TruSense® S300 Process Control Application](#)

- www.youtube.com/watch?v=nCcBPR41f18

 American Water Works Association



FOOD AND BEVERAGE

Accurately measure all types of liquids, emulsions, oils, colloids, and suspensions. The non-contact feature avoids paddles and stirrers and can be mounted well above the material layer.



FLOOD MEASUREMENT

Work across a wide range of temperatures and measure turbulent surfaces accurately. SDI-12 supported.

Specifications

TruSense S-300 Series

Performance	Min Range	46 cm (1.5 ft)
	Max Range	50 m (164 ft)
	Typical Accuracy	+/- 10 mm (.39 in)
	Data Output Rate	1 Hz to 15 Hz, Dynamic Mode averaging from 2 to 30 seconds; Static Mode averaging from .5Hz to 14Hz
	Target Modes	First, strongest, last
	Measurement Modes	Static Mode, Dynamic Mode
	Measurement Filters	Dynamic Mode: Low Pass Filter, Median Filter
Optical & Electrical	Wavelength	905 nm (near IR)
	Divergence	3 mrad (equal to 15 cm beam diameter @ 50 m or .5 ft @ 164 ft) 44 mrad using Diffusing Lens (equal to 220 cm beam diameter @ 50 m or 7.33 ft @ 164 ft)
	I/O	S-300 = TRIG, SDI -12, RS232 without alignment laser S-310 = TRIG, SDI -12, RS232 with alignment laser S-330 = 4-20mA RS232 with alignment laser
	Baud Rate Min/Max	9,600/230,400
	Input Power	12 - 24 VDC
	Current Draw	Measuring = 1.8 Watts, Standby = .48 Watts
Physical	Dimensions (L x W x H)	104.4 x 81.7 x 41.6 mm (4.11 x 3.22 x 1.64 in)
	Weight	Standard = 138.6 g (4.8 oz) OEM = 76 g (2.7 oz)
	Housing & Frame Material	Glass-filled polycarbonate
Environmental	Eye Safety	Class 1, 7 mm (FDA, CFR21) Class 1m (IEC 60825 - 1 : 2001)
	Shock/Vibration	MIL-STD-810
	Moisture	IP65
	Operating Temperature	- 28° to 60° C (- 20° to 140° F)



Ruggedized Enclosure

- Protects the sensor from contamination or damage
- Combines with a tank adaptor to fit most tanks/silos
- Meets the toughest industrial standards
- Includes a terminal block



Tank Adaptor
(air-purge ready)
#7035146



4-In Flange
#3004960



Dust Tube
#3004957



Spanner Wrench
#9034501

