LASER TECH

FLUID LEVEL MEASUREMENT

Sensor Optimized for Fluids

Key Advantages

Accurate and Reliable Measurements

System Integrator Friendly

SENSORS

LTI

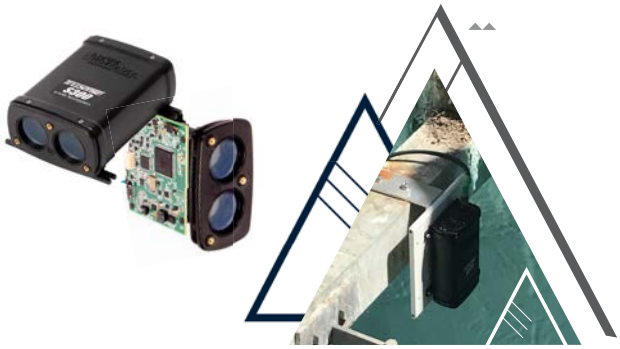
TRUSENSE SENSORS

The Ultimate Sensor

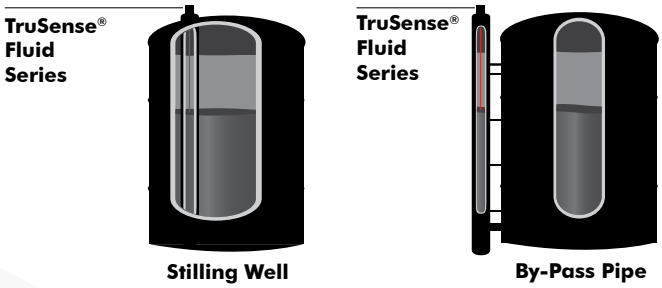
After years of research and development, LTI has engineered the ultimate non-contact fluid measurement sensor specifically designed to directly measure fluids that are highly reflective, turbulent and with any dielectric properties.

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	✓	✓	✓		



Stilling Well | By-Pass Pipe

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

**Stilling pipes are restricted by length and width dimensions. Contact Laser Tech for more details*

Accurate and Repeatable Results

- Collects consistent data by smoothing out the reflective peaks and valleys caused by fluids in random motion
- 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

System Integrator Friendly

- SDI-12
- 4-20 mA
- Minimum Setup Requirements

OEM Version

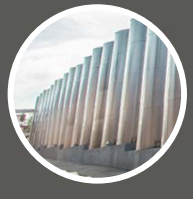
Diffuser Lens

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

APPLICATIONS

WATER AND WASTEWATER

- Accurately measure water levels in narrow spaces or next to wa to walls
- Measure in clear, translucent, or opaque liquids.
- With or without suspended particles



FOOD AND BEVERAGE

- Measure all types of liquids, emulsions, oils, colloids, and suspensions
- Avoid paddles and stirrers
- Mount well above material layer

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 some narrow spaces
- 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

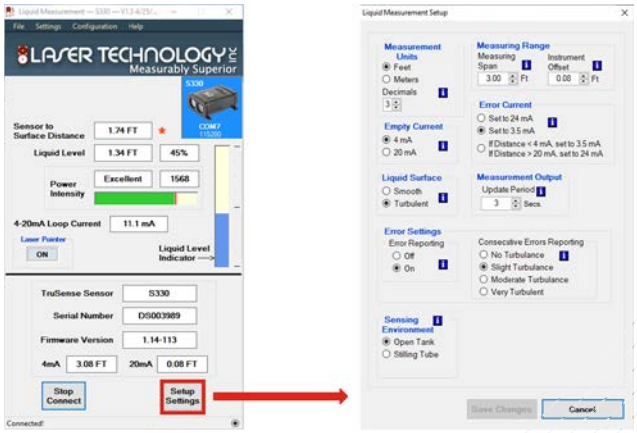
Demo Program

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.

Simple Set Up & Configuration

The TruSense S330 GUI (Graphical User Interface) Tool allows users to se up the 4-20 mA loop quickly.

- Specific to the S330 SKU only
- Designed to allow the customer to set up the S330 easily, without referring to the sensor commands in the manual
- GUI tool provides all relevant information in a simple, easy-to-read format
- Indicates distance measurement, liquid level, 4-20 loop current, and power intensity return, as well as a graphic representation of the liquid level in the vessel



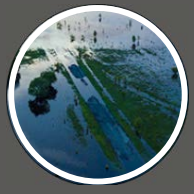
RUGGEDIZED ENCLOSURE

- Protects the sensor from contamination or damage
- Meets the toughest industrial standards
- Includes a terminal block

Spanner Wrench
#9034501

CHEMCIALS PROCESSING

- Work across a wide range of temperatures
- Independent of material properties and dielectric constants
- IS-rated ruggedized enclosure



FLOOD MEASUREMENT

- Work across a wide range of temperatures
- Measure turbulent surfaces
- SDI-12 supported

PROUDUCT SPECIFICATIONS

Performance	Min Range	1.5 ft (46 cm)
	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 .5 Hz to 14 Hz
	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 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 1 m (IEC 60825 - 1 : 2001)
	Shock/Vibration	MIL-STL-810
	Moisture	IP65
	Operating Temperature	-28° to 60° C (-20° to 140° F)

SENSOR RESOURCES

Sensor Videos

TruSense® S300 Process Control Application
www.youtube.com/watch?v=nCcBPR41f18

TruSense® S300 Series: The Ultimate Fluid Measurement Sensor
www.youtube.com/watch?v=2DO2o8rG9Xw

Sensor Website measuringthefuture.com/sen

Live Demo measuringthefuture.com/sen/s330-demo

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