

FLUID & SOLID LEVEL MEASUREMENT

- + Laser Sensors & Tank Adaptors
- + User-Configured Parameters
- + Key Advantages of Lasers
- + Technology Comparison Chart



Laser Sensors & Tank Adaptors

Take your laser measurements to a whole new level with powerful, compact and affordable laser sensors from Laser Technology, Inc.

TruSense® S-230 & OEM

- Outputs data in 4-20, 4-20 HART and RS232 formats
- Aligns the transmit/send lens with built-in laser pointer
- Collects level data as often as you need it



#7006750

OEM #7006751

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



#7024897

Power/Comm/Configuration Cable

- Use a single cable to configure all the sensors in your application



#7054671

Silo/Tank Kit



Tank Adaptor (air-purge ready)
#7035146



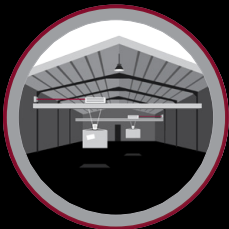
4-Inch Flange
#3004960



Dust Tube
#3004957



Spanner Wrench
#9034501



COLLISION AVOIDANCE
Save yourself from a complete disaster with a rapid warning sensor that can shut things down before a collision happens.



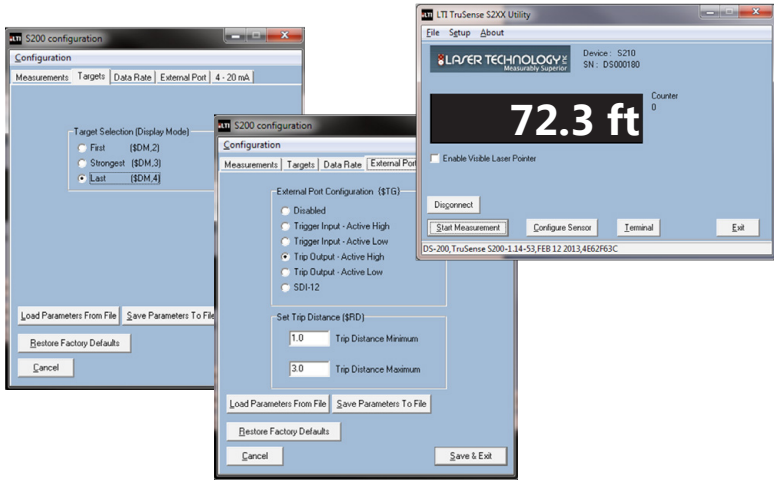
EVENT TRIGGERING
Don't take any chances: Install a safety zone sensor that can trigger alarms and increase worker safety.



SPEED DETECTION
Enforce safe speeds within your plant using a sensor connected to a sign displaying real-time values.

User-Configured Parameters

- Select the target mode that best fits your application
- Adjust the update rate for ideal efficiency
- Integrate the raw data into your control system for real-time measurement monitoring



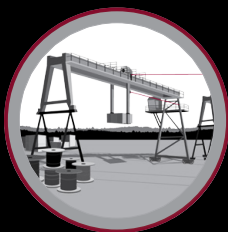
Key Advantages of Lasers

- Easily identifies difficult targets such as non-reflective material and liquids
- Operates without the need of any calibration
- Unaffected by background noise and vapor pressure
- Handles low dielectric substances and acoustically absorbing materials



Technology Comparison Chart

Characteristic	Time-of-Flight Laser	Ultrasonic	Guided-Wave Radar	Through-Air Laser	Weight and Cable	Load Cells	Phase-Shift Laser
Non-Contact	•	•		•			•
Instant Response	•	•	•	•		•	•
Low Purchase Cost	•	•	•	•	•		•
Material Density Dependent	•						•
Unaffected by Material Buildup	•	•		•			•
Penetrates Airborne Particulates	•	•	•	•	•	•	
Range >75 m (246 ft)	•				•	•	
Easy to Install	•				•		•
Versatile (Multiple Applications)	•	•		•			



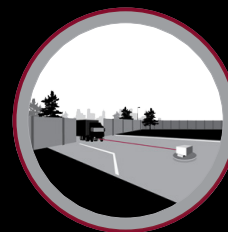
POSITIONING

Always have a sense of where things are positioned thanks to LTI's long-range, non-contact measurement technology.



GUIDANCE

Ensure efficient operations by using a precise laser sensor to guide equipment.

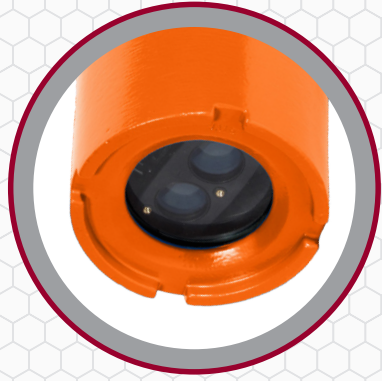


DETECTION

Position an LTI sensor wherever you need to know if something is present or not.

Specifications

		TruSense S-200 Series
Performance	Min Range	1.5 ft (46 cm)
	Max Range	400 ft (122 m); Range may be increased with user settings
	Accuracy	0.1 ft (4 cm)
	Data Output Rate	<1 Hz up to 14 Hz, depending on target
	Target Modes	First, strongest, last, first-second-third, Last-second to last, first-strongest-last, First-second-third-strongest-last
Optical & Electrical	Wavelength	905 nm (near IR)
	Divergence	3 mrad (equal to 1 ft beam diameter @ 328 ft or 30 cm @ 100 m)
	I/O	S-200 = TRIG, SDI12, RS232 without alignment laser S-210 = TRIG, SDI12, RS232 with alignment laser S-230 = 4-20, 4-20 HART, RS232 with alignment laser
	Input Power	12 VDC
	Current Draw	Measuring = 150 mA, Standby = 40 mA
	Physical	Dimensions (L x W x H)
Weight		Standard = 4.8 oz (138.6 g), OEM = 2.7 oz (76 g)
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-STD-810
	Moisture	IP54
	Operating Temperature	- 20° to 140° F (- 28° to 60° C)



Ruggedized Enclosure Specs:

Weight: 8 lbs (3.62 kg)
 Dimensions: 5 in diameter x 10 in long (12.7 x 25.4 cm)
 Conduit Fitting: 3/4 in NPT

US Ratings for Enclosure:

Division Ratings
 Classified
 Class I, Div 1 Groups B, C, D
 Class II, Div 1 Groups E, F, G
 Class III Type 4x
 Zone Ratings
 Class I, Zone 1, AEx d IIC
 Ex d IIC
 Class III
 Type 4x
 Approved Instrument Housing
 Class I, Div 1 Groups B, C, D
 FM 3615
 Class II, Div 1 Groups E, F, G
 Type 4x

Global Ratings:
 ATEX (flameproof-DEMKO)
 II 2G Ex d IIB+H2
 II 2D Ex tD A20
 IP66
 IECEx (flameproof-UL)
 Ex d IIB+H2
 IP66 IEC60529

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