

A Higher Level of Performance



Data Sheet

OptioLaser

L200

Level, Distance & Position Measurement
of Solids and Liquids



For more information, please visit >
www.hawkmeasurement.com

Overview

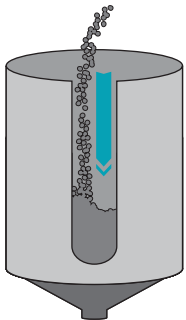
OptioLaser L200



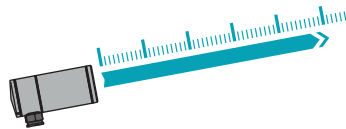
Principle of Operation

The OptioLaser L200 is a non-contact laser sensor used to measure the distance to solid and liquid surfaces, slurries or murky water. Solid surfaces can be anything from a metal plate on the side of an overhead crane, to the top of material stored in a silo. With an easy to use menu system, the OptioLaser can be configured for either distance or level measurement and the high accuracy, long range and fast update rate make this the ideal sensor for many different applications.

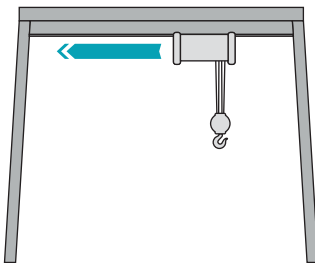
Applications



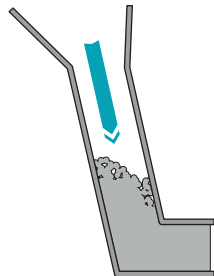
Level control



Distance measurement



Positioning



Blockage detection

Technical Specifications

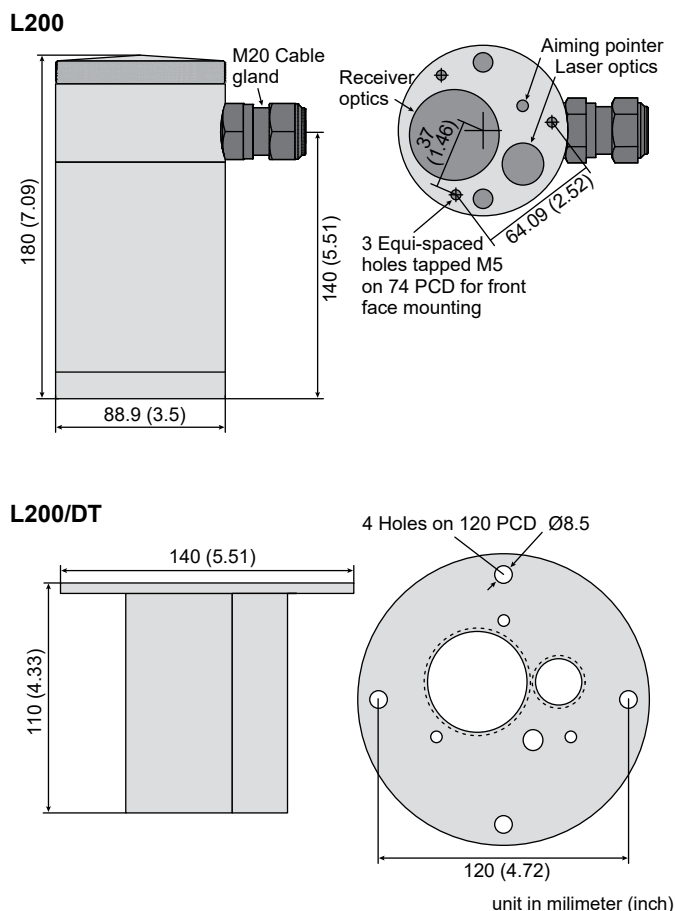
Performance data		
Sensing range	0.3 ... 100 m (0.98' ... 328')	
Resolution	10 mm (0.39")	
Accuracy	< 0.1% of full range at 20°C	
Update rate	5 readings per second	
Technical data		
Power supply	220 / 110 V ac or 24 V dc nominal (12 ... 28 V dc)	
Current consumption	100 mA nominal	
Output		
Analog	4 ... 20 mA NAMUR compliant self-powered & non-isolated. 2 x Relays (N/O), 60 V dc at 3.5 A.	
Communication	USB at 115200 baud 8-N-1	
Mechanical data		
Diameter	L200 : 88.9 mm (3.5")	L200/DT: 140 mm (5.51")
Length	L200 : 180 mm (7.09")	L200/DT: 110 mm (4.33")
Weight	L200 : 2 kg (4.41 lb)	L200/DT: 1.5 kg (3.31 lb)
Connection	Flange accessory (L200 /DT) with with 4 Ø 8.5 mm holes on 120 PCD	
Housing material	303 Stainless steel	
Optical data		
Laser power	Measuring laser: 15 W (peak)	Visible aiming laser: < 5 mW red
Optical aperture	75 mm (2.95")	
Beam divergence	< 1° to half power points	
Lens material	Impact resistant acrylic	
Laser safety classification	Measuring laser: Class 1M CAUTION: Do not view laser directly with optical instruments.	Visible aiming laser: Class 2 CAUTION: Do not view laser directly with optical instruments
Environmental data		
Operating temp.	-20°C ... +60°C	
Pressure	Atmospheric	
Enclosure rating	IP66	

Features

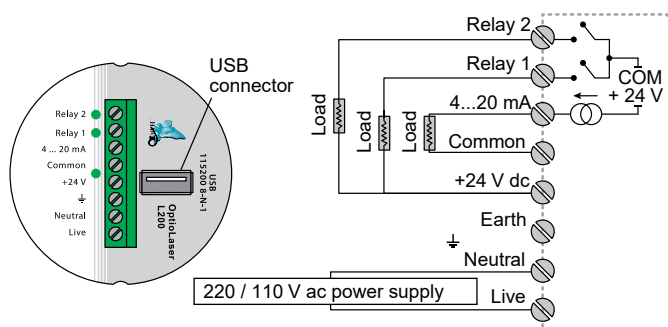
- Non-contact measurement with laser technology
- 303 Stainless steel housing
- Measurement range up to 100 meters (328 feet)
- Continuous measurement with a resolution of 10 mm
- NAMUR compliant 4...20 mA output
- 2 Normally open relay outputs
- Easy conguration via USB
- 220 / 110 V ac or 24 V dc power supply
- Visible aiming pointer



Dimension Drawings



Connections



OptioLaser L100/L200 Laser Transmitter Spare Parts

Model

LXDT Dust Tube for L100/L200 OptioLaser Laser Level Transmitter

LXHP Handheld Programmer for L100/L200 OptioLaser Laser Level Transmitter

LXSB Swivel Bracket for L100/L200 OptioLaser Laser Level Transmitter

Software Menus

- Open Laser Terminal Software and connect.
- Press the <CORRESPONDING> keyboard key to access the settings menu.
- Press the keyboard key to select the required menu item.
- To restart measurements, press the <SPACE> keyboard key.

Menu	Selection	Default value
<A> 4 ... 20 mA settings	 4 mA	25.00 m
	<C> 20 mA	0.60 m
	<D> Fail safe current	> 21.0 mA
	<E> Test	21.50 mA
<F> Relay settings	<G> Relay A switch point 1	1.00 m
	<H> Relay A switch point 2	2.00 m
	<I> Relay A mode	near => closed far => open
	<J> Relay B switch point 1	1.00 m
	<K> Relay B switch point 2	2.00 m
	<L> Relay B mode	near => closed far => open
	<M> Relay test	A:closed B:closed
<N> System settings	<O> Measuring units	meters
	<P> Zero distance offset	0.00 m
	<Q> Lost signal timeout	4.0 sec
	<R> Smoothing filter	ON
	<S> Filling rate filter	OFF
	<U> Moving obstacle filter	ON
	<V> Obstacle filter size	16 results
	<W> Visible aimer	OFF

OptioLaser L200 Laser Transmitter for Level

Model

L100 OptioLaser Laser Level Transmitter (up to 164ft)

L200 OptioLaser Laser Level Transmitter (up to 328ft)

Dust Tube + USB Programming Cable
(Required for every OptioLaser L100/L200)

DT Dust Tube, Stainless Steel

Accessories - Handheld Programmer
(Optional)

HP Handheld Programmer

XX Not Required

Accessories - Swivel Bracket
(Optional)

SB Swivel Bracket

XX Not Required

L200 DT HP SB

Contact

OptioLaser L200



Hawk Measurement Systems (Head Office)

15 - 17 Maurice Court
Nunawading VIC 3131, AUSTRALIA

Phone: +61 3 9873 4750

Fax: +61 3 9873 4538

info@hawk.com.au

For more information and global representatives: www.hawkmeasurement.com

Hawk Measurement

5010 Gateway Drive, Medina, OH 44256, USA

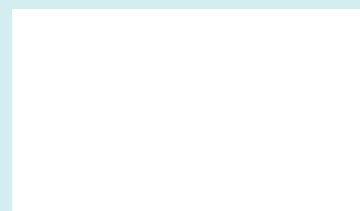
Phone: +1 888 HAWKLEVEL (1-888-429-5538)

Phone: +1 978 304 3000 / +1 877-356-5463

Fax: +1 978 304 1462 / +1 330-331-7172

info@hawkmeasurement.com

Represented by:



Additional product warranty and application guarantees upon request.
Technical data subject to change without notice.

