



# LASER DISTANCE, LEVEL & POSITIONING TRANSMITTER

## Model LM200

Laser Measurement (Pty) Ltd

### FEATURES

- Long Range to 394 ft. / 120 m on level and 1150ft. / 350m on reflector
- No Beam Divergence = No False Echoes
- Measures any Surface at any Angle or reflective target for positioning applications
- Rugged and Robust Enclosure
- Built-in Laser Pointer
- No Calibration Required
- No Special Configuration Software Required

### SPECIFICATIONS

#### Measurement Range

Range	Up to 394ft. / 120 m. level and 1150ft. / 350m on reflector
Resolution	0.4 in. / 10 mm.
Accuracy	± 1 in. / 25 mm.
Update Rate	3 readings / sec on level 1 reading / sec on positioning over 175m 1 reading /1.5 sec on positioning over 350m

#### Output

Analog	4-20 mA, NAMUR Compliant Isolated or Non-Isolated (field selectable)
Serial	RS232 for Testing, Troubleshooting, and Configuration

Switching	2 SPST Relays Max 60 VDC 1A
AC Rating	Max 220 VAC 5A
DC Rating	Max 60 VDC 1A

<b>Electric Power</b>	24 VDC (16-32 VDC) 110 VAC (±10% / 50Hz to 60Hz) 220 VAC (±10% / 50Hz to 60Hz)
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#### Power

<b>Consumption</b>	
Start Up	6 Watts
Running Normal	0.25 Amp Peak ; 0.15 Amp Continuous

<b>Laser Safety</b>	Main laser: Class 1M Aiming laser: Class 3R EN60825; IEC 825-1:1993 Caution: Do not stare directly into the laser beam while the laser is running.
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<b>Approvals</b>	FM CL II & III; Div. 1 & 2; Gr. E F, & G, DIP IEC DIP A21/22 IP65 T <sub>A</sub> T4
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### OPTIONS

- Dust Tubes & Flange
- Laser Communication Device (LCD2)
- Hand-Held Programmer (PZ71)
- Com 1
- Reflector board (REFL)



LM200 Shown with Cable Glands

### LM200 Shown with Optional Dust Tubes



#### Optical

Optical Aperture	4 in. / 100 mm.
Laser Beam Diameter	1.97 in. / 50 mm.
Receiver Beam Diameter	1.97 in. / 50 mm.
Beam Divergence	<0.2°

#### Environmental

Operating Temperature	-40° to 150°F / -40° to 65°C
Pressure	Atmospheric

<b>Electrical Gland Connection</b>	2x M20 x 1.5 2x Cable Gland Supplied
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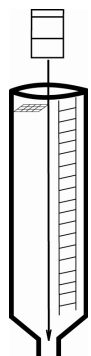
#### Dimensions

Diameter	5 in. / 127 mm.
Length	12 in. / 300 mm.
Weight	9.9 lbs. / 4.5 kg.

#### Enclosure

<b>Enclosure Rating</b>	Dual Compartment Powder Coated Aluminum IP65
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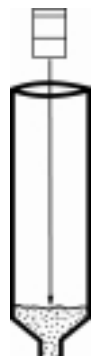
<b>Process Connection</b>	Adaptable to ANSI Flanges 4" / DIN100 Flanges and Higher
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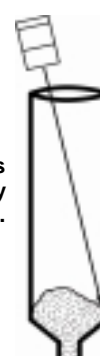
Easy Measurement in Silos with an Internal Structure and/or Buildup



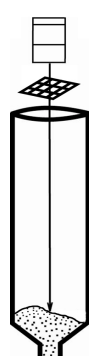
Level Silos and Bins. Ideal for Pellets, Grain, Coffee, Dry Bulk Solids, Opaque Liquids and Powders



Measures surfaces at any angle.





Non-contact, level measurement through obstacles such as protective grids and etc.

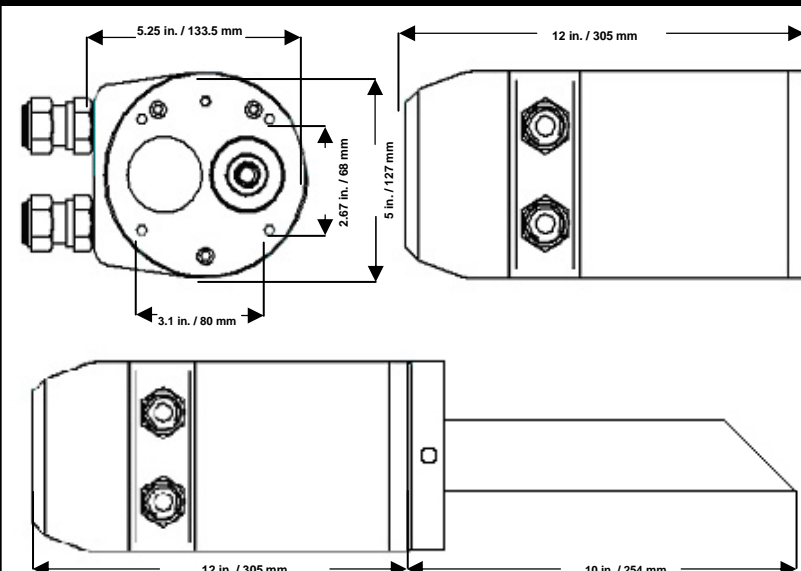


**ORDERING INFORMATION:**

LM200 / r :

/r	Range	Ordering Code	
/L/	20	0.5 - 20 m	LM200/20
	40	0.5 - 40 m	LM200/40
	60-120	0.5 - 120 m	LM200/60-120
/P	175	0.5 - 175 m	LM200/175
	350	0.5 - 350 m	LM200/350

AVAILABLE OPTIONAL ITEMS:	
REFL	Reflector: 36" x 36" / 1 m x 1 m
REFS	Reflector: 20" x 20" / 50cm x 50cm
TUB3	Dust Tubes: 316/316L Stainless Steel Includes mounting flange
FLG	Custom made at additional cost
LCD2	Laser Communication Device for programming and demo purposes 
PZ71	Hand held programmer with Communication Software and Cable. Current Model: Palm Zire71 (Consult factory for model availability) 
COM1	Communication cable to PC, laptop or handheld for programming and data logging

DIMENSIONS		TERMINAL CONNECTIONS																																					
		<table border="1"> <thead> <tr> <th colspan="2">110/220 VAC</th> <th colspan="2">Not Connected</th> <th colspan="2">24 VDC</th> </tr> <tr> <th>N</th> <th>L</th> <th></th> <th></th> <th>-</th> <th>+2V DC</th> </tr> </thead> <tbody> <tr> <td>∅</td> <td>∅</td> <td>∅</td> <td>∅</td> <td>∅</td> <td>∅</td> </tr> <tr> <td>∅</td> <td>∅</td> <td>∅</td> <td>∅</td> <td>∅</td> <td>∅</td> </tr> <tr> <td>RE-TURN</td> <td>OUT</td> <td>COM</td> <td>N/O</td> <td>COM</td> <td>N/O</td> </tr> <tr> <td colspan="2">4-20mA</td> <td colspan="2">Relay B</td> <td colspan="2">Relay A</td> </tr> </tbody> </table> <p>• Isolated 4-20 mA output requires +24VDC power supplied from customer device</p>		110/220 VAC		Not Connected		24 VDC		N	L			-	+2V DC	∅	∅	∅	∅	∅	∅	∅	∅	∅	∅	∅	∅	RE-TURN	OUT	COM	N/O	COM	N/O	4-20mA		Relay B		Relay A	
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