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# HIGH PERFORMANCE LASER, LEVEL & POSITIONING TRANSMITTER

## LASERMETER Model LM200

### FEATURES

- Range up to 200 ft / 60 m (level applications) and up to 1312 ft. / 400 m (positioning applications)
- No Beam Divergence = No False Echoes
- Measures any Surface at Any Angle
- Rugged and Robust Enclosure
- Built-in Laser Pointer
- Accepts 110/220 VAC and +24VDC Input Voltages
- Last Pulse Detection for Measurement with Light and Moderate Dust

### SPECIFICATIONS

#### Measurement Range

**Level** Dark color surface 1.5ft/0.5m to 100ft/30m -  
**Level** Light color surface 1.5ft/0.5m to 200ft/60m -  
**Positioning** Reflective targets 1.5ft/0.5m to 1312ft/400m -

Resolution 0.4 in. / 10 mm.

Accuracy ± 1.5 in. / 30 mm.

Update Rate 3 readings / second to  
1 reading / 250 seconds

#### Output

Analog 4-20 mA, NAMUR Compliant  
Isolated, Self Powered

Serial RS232 for Testing, Troubleshooting  
and Configuration

Switching 2 SPST Relays

AC Rating Max 1A resistive @120VAC and 0.5A@250VAC  
Max 1A @ 60VDC, 60W

DC Rating Max 1A @ 120VAC

**Electric Power** 24 VDC (16-32 VDC)

110 VAC (±10% / 50Hz to 60Hz)

220 VAC (±10% / 50Hz to 60Hz)

#### Power

##### Consumption

Start Up 6 Watts

Running Normal 0.25 Amp Peak ; 0.15 Amp Continuous

#### Laser Safety

Class 1 Eye Safe;  
EN60825; IEC 825-1:1993  
CE

#### Approvals

### OPTIONS

- ANSI / DIN Flanges
- Laser Communication Device (LCD2)
- Adjustable Mounting Bracket (ADJ4)
- Positioning Reflector (REFL)



LM200 Shown with Cable Glands



LM200 Shown with Standard Dust Tubes

coal, black plastic pellets  
plastic pellets, grain  
rail car, stacker, reclaimers

#### 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

#### Electrical Connection

2x 1/2" FNPT

2x Cable Gland Supplied

#### Dimensions

Diameter 5.25 in. / 135.5 mm.

Length 12 in. / 305 mm.

Weight 9.9 lbs. / 4.5 kg.

#### Enclosure

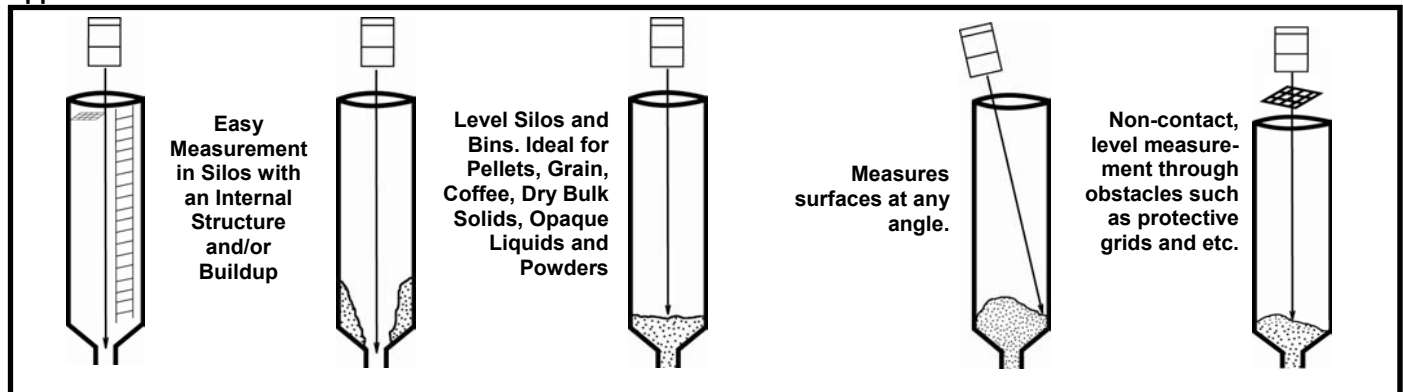
Dual Compartment Powder Coated Aluminum

#### Enclosure Rating

IP65

#### Process Connection

Require minimum opening of 4 in / 100 mm and is adaptable to ANSI Flanges 4" / DIN 100 and higher



**ORDERING INFORMATION:**

**LM200 / a / b:**

**/a Unit Options**

**SL** Standard Unit with Laser Pointer (level applications only)

**Pxxxx** Positioning Unit with Laser Pointer (positioning applications only). Specify the application maximum positioning range in feet. For example: 200 feet = P0200 (**see note below**)

**Note:** For **positioning applications only**, the following accessories are **mandatory** and are required for optimal performance and will be supplied with the positioning laser transmitter: **TUB4S** Standard Dust Tubes, **REFL** Reflector, and **ADJ4** Adjustable Mounting Bracket.

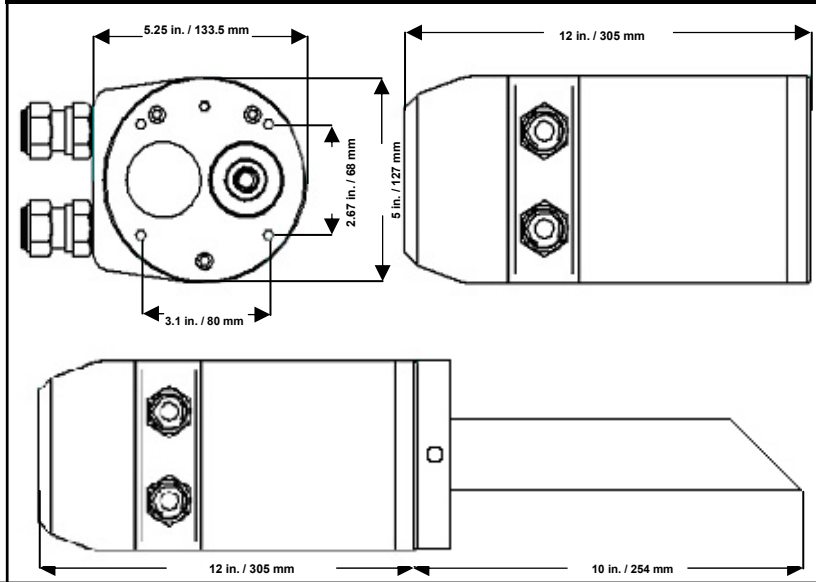
**/b Approvals:**

**CE** General Approvals

AVAILABLE OPTIONAL ITEMS:	
<b>LCD2</b>	<b>Laser Communication Device</b> for programming and demo purposes <b>Note:</b> Programming also can be implemented with Desktop PC, Laptop and PDA
<b>ADJ4</b>	Adjustable Mounting bracket for flexible aiming
<b>REFL</b>	Reflector 36" X 36" / 1m X 1m—for positioning applications
AVAILABLE THIRD PARTY ITEMS: (These items must be purchased from recommended vendor)	
<b>High Pressure Site Glass</b>	ANSI 4"High Press./ Temp. sight glass unit. Includes sight glass, spray ring, & flange for non-contact, non-intrusive level measurement in pressurized reactor vessels. Max press. 150 PSI / 10 Bar; Max temp. 450°F / 232°C. Recommended Vendor: JM Canty www.jmcanty.com Ph. 716-625-4227 Part numbers: (Site glass) SS-4-FV150-SS-5.90D (Spray ring) SS-4-SR150
<b>Purge Kit Cl. I, Div. 2</b>	<b>Purge system kit:</b> Class I, Div 2 Gr C & D Part number: 2-1Z83-19-LSR
<b>Purge Kit Cl. I, Div. 1</b>	<b>Purge system kit:</b> Class I, Div 1 Gr B, C & D Part number: 2-1Z83-19-X
Recommended vendor for Purge Kits: CSC, Inc. www.controlsystemsusa.com Ph. 877-999-2724	

REQUIRED MOUNTING ACCESSORIES Select only one:	
<b>TUB4S</b>	Standard 316 SS Dust Tubes with (2) built-in purge ports (1/8" FNPT). See DIMENSIONS
ANSI	DIN
<b>ANSI/DIN Flanges are supplied with Standard Dust Tube TUB4S</b>	
<b>FLGLM200S44</b> 4" 150# 304SS RF Flange	<b>FLGLM200S4DN100</b> DIN 100 PN10 304SS RF Flange
<b>FLGLM200S46</b> 6" 150# 304SS RF Flange	<b>FLGLM200S4DN125</b> DIN 125 PN10 304SS RF Flange
<b>FLGLM200XXXX</b> Consult factory for availability	For any custom option requiring a different material, flange size, and/or mounting configuration.

**DIMENSIONS** **TERMINAL CONNECTIONS**



110VAC 220VAC		Not in use		24 VDC 4-20 mA	
N	L	NC	NC	-	+
∅	∅	∅	∅	∅	∅
∅	∅	∅	∅	∅	∅
Re- turn	OUT	COM	NO	COM	NO
4-20mA		Relay B		Relay A	

Earth symbol (ground) is shown to the left of the terminal block. The terminal block is labeled **DB9 RS232 Port**.

**K-TEK**  
18321 Swamp Road  
Prairieville, Louisiana 70769  
USA  
Telephone: (1) 225-673-6100  
Fax: (1) 225-673-2525

LM200-0202-1 Rev D (05-2005)  
For latest version of this data sheet, visit  
www.ktekcorp.com.



Email: sales@ktekcorp.com  
Website: www.ktekcorp.com