



# LASER DISTANCE & POSITIONING TRANSMITTER

Laser Measurement (Pty) Ltd

Model LM1500

## FEATURES

- Long Range to 1400m
- No Beam Divergence = No False Echoes
- Measures to reflective target (Standard)
- Rugged and Robust Enclosure
- Built-in Laser Pointer
- No Calibration Required
- No Special Configuration Software Required

## SPECIFICATIONS

### Measurement Range

Range Up to 1400 m.  
 Resolution +/-100 mm.  
 Update Rate 1.5 sec / reading up to 750m and 3 sec / reading up to 1400m to 1 reading / 60 seconds

### 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  
**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 0.25 Amp Peak ; 0.15 Amp Continuous  
 Normal

### Laser Safety

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.

### Approvals

FM CL II & III; Div. 1 & 2; Gr. E F, & G, DIP  
 IEC DIP A21/22T<sub>A</sub>T6  
 (Pending)

## OPTIONS

- Laser Communication Device (LCD2)
- Hand-Held Programmer (PZ71)
- Com 1
- Stainless Steel Dust Tube and Flange
- REFL (reflector target)



LM1500 Shown with Cable Glands



LM1500 Shown with 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

## Electrical Gland Connection Dimensions

2x M20 x 1.5  
 2x Cable Gland Supplied

## Diameter

5 in. / 127 mm.

## Length

14 in. / 350 mm.

## Weight

10 lbs. / 4.7 kg.

## Enclosure

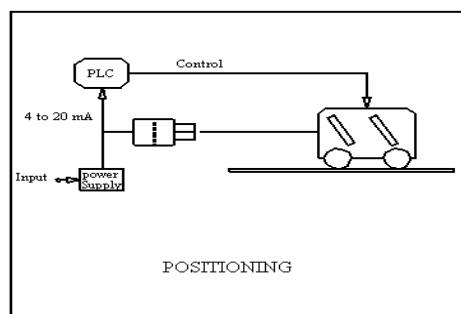
Dual Compartment Powder Coated Aluminum

## Enclosure Rating

IP65

## Process Connection



Adaptable to ANSI Flanges 4" / DIN100 Flanges and Higher

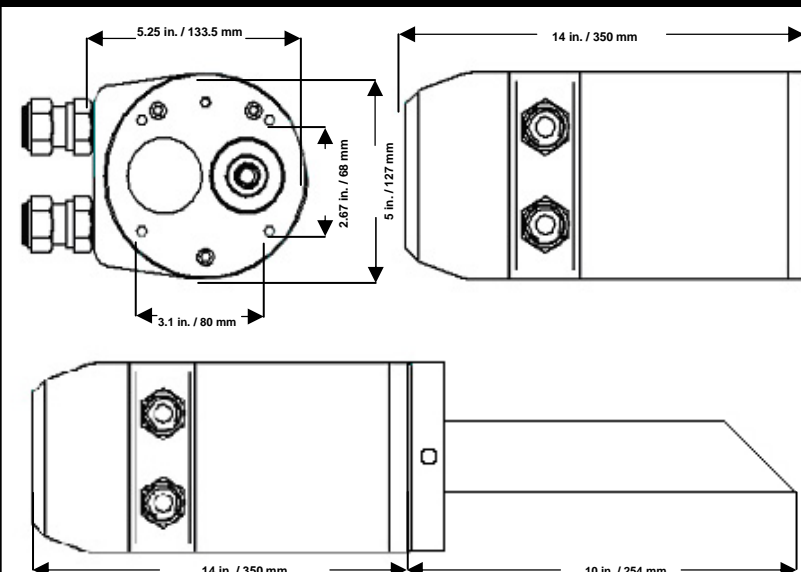


**ORDERING INFORMATION:**

**LM1500 / r :**

<b>/r</b>	<b>Range</b>	<b>Ordering Code</b>
<b>/A</b>	1 - 750 m	LM1500/A
<b>/B</b>	1 - 1400 m	LM1500/B

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

<b>DIMENSIONS</b>		<b>TERMINAL CONNECTIONS</b>																																					
		<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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