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INTERMEDIATE RANGE LASER LEVEL & POSITIONING TRANSMITTER

LASERMETER Model LM80

FEATURES

- Range up 100 ft. / 30m (level applications) and up to 500 ft. /150 m (positioning applications)
- No Beam Divergence = No False Echoes
- Measures any Surface at Any Angle
- Rugged and Robust Aluminum Enclosure
- Built-in Purge Port (1/8" FNPT)
- No Calibration Required
- No Special Configuration Software Required
- Last Pulse Detection for Measurement with Light Dust

SPECIFICATIONS

Measurement Range

Level	Dark color surface 1.5ft/0.5m to 60ft/18m - black plastic pellets
Level	Light color surface 1.5ft/0.5m to 100ft/30m - plastic pellets, grain
Positioning	Reflective targets 1.5ft/0.5m to 500ft/150m - tripper car, overhead crane
Resolution	0.4 in. / 10 mm.
Accuracy	± 1.5 in. / 30 mm.
Update Rate	3 readings / second to 1 reading / 60 seconds

Output

Analog	4-20 mA, NAMUR Compliant Active, Self Powered
Serial	RS232 for Testing, Troubleshooting, and Configuration
Switching	2 SPST Relays (not available with built-in heated glass)
AC Rating	Max 1A resistive @ 120 VAC and 0.5A@ 250VAC Max 1A @ 60VDC, 60W
DC Rating	Max 1A @ 120 VAC
Inductive Load	
Electric Power	24 VDC (16-32 VDC)

Power Consumption

Start Up	6 Watts
Running	0.4 Amp Peak ; 0.2 Amp Continuous 0.35 Amp with built-in heated glass

Laser Safety

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

Approvals

General purpose only

OPTIONS

- Stainless Steel Mounting Plate (MP)
- ANSI / DIN Flanges
- Laser Communication Device (LCD2)
- Laser Pointer
- Built-in Heated Glass
- Portable Power Pack (PPK)



LM80 Shown with Cable Gland



LM80 Shown with Standard Dust Tube

Optical

Optical Aperture	3 in. / 80 mm
Laser Beam Diameter	1.5 in. / 30 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

1/2" FNPT
1x cable gland supplied

Dimensions

Diameter	4.3 in. / 110 mm
Length	6.9 in. / 175 mm
Weight	3.25 lbs. / 1.5 kg.

Enclosure

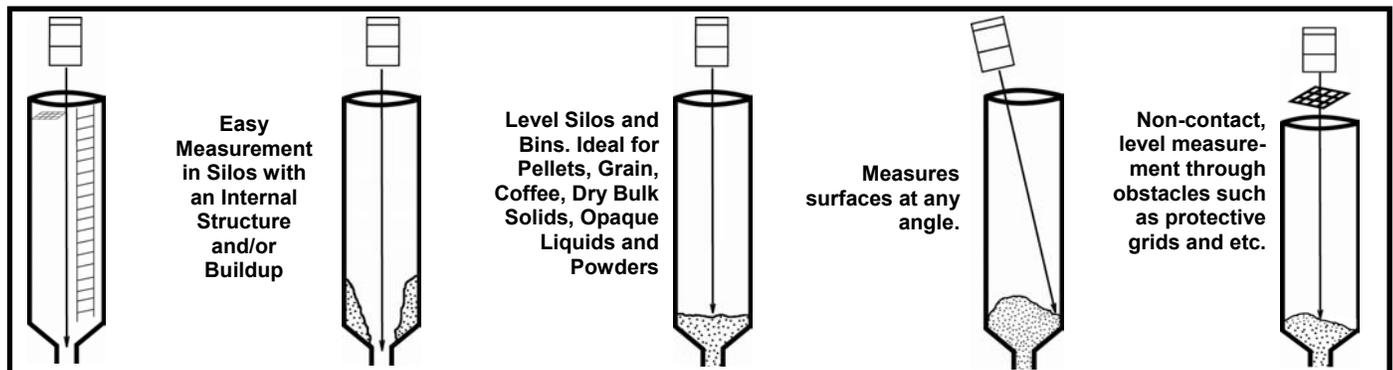
Dual Compartment Powder Coated Aluminum

Enclosure Rating

IP65

Process Connection

Requires minimum opening of 3 in / 80 mm and is adaptable to ANSI Flanges 4" / DIN100 Flanges and Higher



ORDERING INFORMATION:

LM80 / a / b:

/a Unit Options

- SX** Standard Unit without Laser Pointer (level applications only)
- SL** Standard Unit with Laser Pointer (level applications only)
- HL** Laser Unit with built-in heated glass & Laser Pointer (level applications only with possible condensation on the optic)
(See note below.)

Note: LM80 with built-in heated glass is with general approvals only. Switching relays are not available with this option.

Pxxx Positioning Unit with Laser Pointer (positioning applications only). Specify the application maximum positioning range in feet. For example: 75 feet = P075 (See note below.)

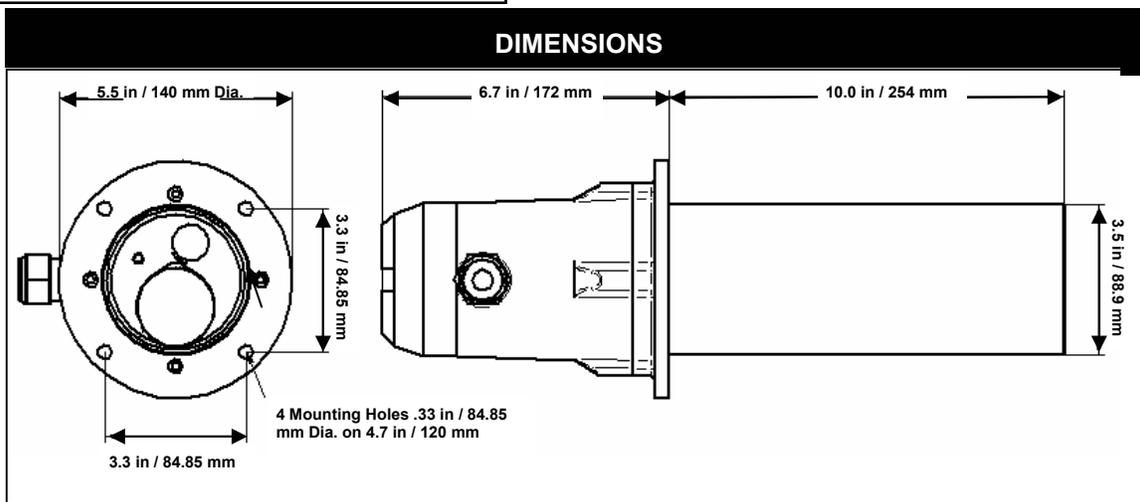
Note: For **positioning applications only**, the following accessories are **mandatory** for optimal performance and will be supplied with the positioning laser transmitter: **MP1LM80** Standard Dust Tube, **REFM** Reflector and **ADJ4** Adjustable Mounting Bracket.

/b Approvals

X None

AVAILABLE OPTIONAL ITEMS:																							
LCD2	Laser Communication Device for programming and demo purposes Note: Programming also can be implemented with Desktop PC, Laptop or PDA																						
ADJ4	Adjustable Mounting Bracket - For Flexible Aiming																						
REFM	Reflector 20" x 20" / 50cm x 50cm - for positioning applications																						
PPK	Battery powered pack-for demo purposes and mobility																						
TERMINAL CONNECTIONS																							
<div style="display: flex; align-items: center;"> ⊘ Earth </div> <table border="1" style="margin-left: 20px;"> <thead> <tr> <th colspan="3">ISOLATED RELAYS</th> <th>4-20 OUT</th> <th>0v COM</th> <th>24v +</th> </tr> <tr> <th>COM</th> <th>A</th> <th>B</th> <th></th> <th></th> <th></th> </tr> </thead> <tbody> <tr> <td style="text-align: center;">⊘</td> </tr> </tbody> </table> <div style="margin-left: 20px; margin-top: 5px;"> </div>						ISOLATED RELAYS			4-20 OUT	0v COM	24v +	COM	A	B				⊘	⊘	⊘	⊘	⊘	⊘
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REQUIRED MOUNTING ACCESSORIES	
Select Only One :	
MP1 LM80	Standard 304 SS Dust tube and mounting plate bolt pattern identical to LM80 flanged face plate. (See Dimensions below)
MP4 LM80	304 Stainless steel mounting plate with 4" 150# ANSI and DIN100 PN10 bolt pattern and integral dust tube
MP6 LM80	304 Stainless steel mounting plate with 6" 150# ANSI and DIN125 PN10 bolt pattern and integral dust tube
ANSI	DIN
ANSI/DIN Flanges are supplied with Integral Dust Tube	
FLGLM80S44 4" 150# 304SS RF Flange	FLGLM80S4DN100 DIN 100 PN10 304SS RF Flange
FLGLM80S46 6" 150# 304SS RF Flange	FLGLM80S4DN125 DIN 125 PN10 304SS RF Flange
FLGLM80XXX Consult factory for availability	For any custom option requiring a different material, flange size, and/or mounting configuration.



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