



LOW COST LASER LEVEL & DISTANCE TRANSMITTER

Laser Measurement (Pty)

Model LM80/P

FEATURES

- Long Range to 150 m on reflector
- No Beam Divergence = No False Echoes
- Measures off reflective target
- Rugged and Robust Enclosure
- Built-in purge port
- Last Pulse Detection for Measurement with Light and Moderate Dust
- Automatic Color Compensation
- Visible aiming laser

OPTIONS

- Flanges
- Dust Tube
- Reflector Board (REFS)
- Laser Communication Device (LCD2)
- Hand-Held Programmer (Palm Z71)
- Built-in heated glass



LM80 Shown with Cable Gland



LM80 Shown with optional dust tube

SPECIFICATIONS

Measurement Range

| | |
|-------------|--|
| Range | Up to 328ft / 150 m |
| Resolution | 0.4 in. / 10 mm. |
| Accuracy | ± 1 in. / 25 mm. |
| Update Rate | 3 readings / second - up to 80 m and 1.5 readings / second - 80 - 150 m up 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 |
| AC Rating | Max 1A resistive @ 120 VAC and 0.5A @ 250VAC |
| DC Rating | Max 1A @ 60VDC, 60W |
| Inductive Load | Max 1A @ 120 VAC |

Electric Power 24 VDC (18-32 VDC)

Power Consumption

| | |
|----------------|-----------------------------------|
| Start Up | 6 Watts |
| Running Normal | 0.4 Amp Peak ; 0.2 Amp Continuous |

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.
FM CL II & III; Div. 1 & 2; Gr. E, F, & G, DIP
IEC DIP A21/22 IP66 T_AT6
CSA CL II & III, Div. 1 & 2, Gr. E, F & G, DIP
ATEX II D ZONE20/21/22 (Pending)

Approvals

Optical

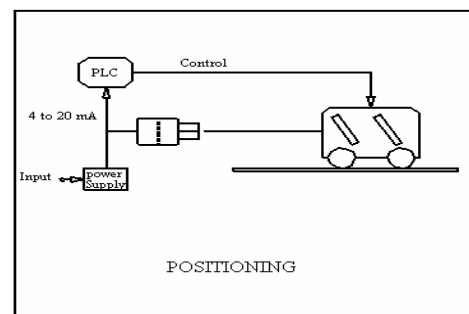
| | |
|------------------------|------------------|
| Optical Aperture | 3 in. / 90 mm |
| Laser Beam Diameter | 1.5 in. / 30 mm |
| Receiver Beam Diameter | 1.97 in. / 50 mm |
| Beam Divergence | <0.2° |

Environmental

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

Electrical Gland Connection 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 | Adaptable to ANSI Flanges 4" / DIN100 Flanges and Higher |



ORDERING INFORMATION:

LM80 / o :

o/r Application

/S/r Standard/range A - 0.5m - 75m

Standard/range B - 0.5m - 150m

Ordering code

LM80/S/75

LM80/S/150


/C/r Hotglass (Anti-condensation)/range A - 0.5m - 75m

Hotglass (Anti-condensation)/range B - 0.5m - 150m

LM80/C/75

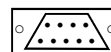
LM80/C/150

AVAILABLE OPTIONAL ITEMS:

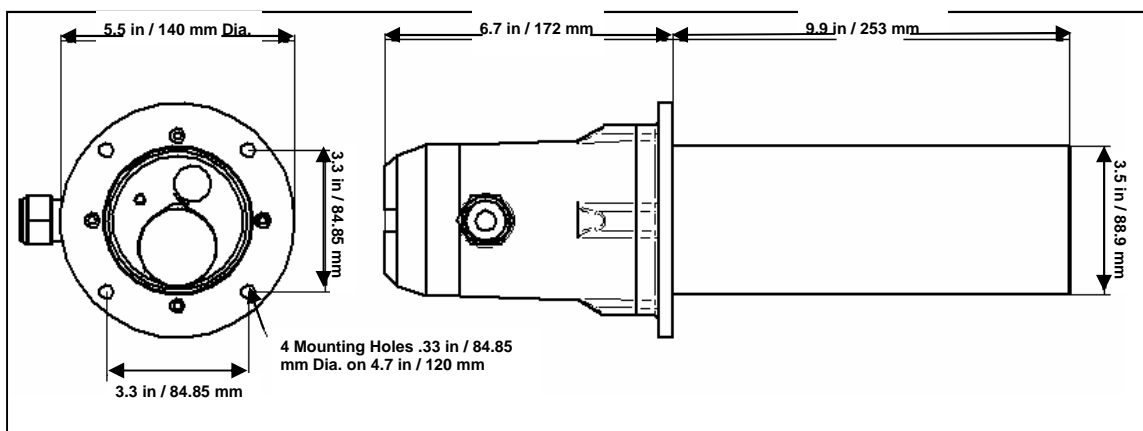
| | |
|----------|--|
| TUB_LM80 | Dust Tube: Powder coated mild steel |
| REFS | Reflector Board for positioning applications 0.5m x 0.5m |
| FLG | Custom made at additional cost |
| LCD2 | Laser Communication Device for programming and demo purposes  |
| COM 1 | Communication cable to PC, laptop or handheld for programming and data logging |

TERMINAL CONNECTIONS

| | | | | | |
|-----------------|---|---|------|-----|-----|
| Earth | | | | | |
| ISOLATED RELAYS | | | 4-20 | 0v | 24v |
| COM | A | B | OUT | COM | + |
| Ø | Ø | Ø | Ø | Ø | Ø |



DIMENSIONS



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