DataLoop™ LI24 Series
Intrinsically Safe Level Indicator

Application
The intrinsically safe loop powered level indicator displays engineering units connected in series with one 4-20 mA continuous level transmitter, and is available with two optional relays and an isolated 4-20 mA repeater. Select this panel mount indicator for use with intrinsically safe two-wire level transmitters. For field mount installation, add a single or two indicator NEMA box.

Features
- LCD main display with secondary unit and bar graph display
- Easy configuration via the push button display module
- Available with two solid-state, latching relays and an isolated 4-20 mA repeater
- DIN enclosure with NEMA 4X faceplate and shallow case
- Linear, square root and programmable exponent functions
- Non-volatile memory with security password protection
- Windowed NEMA box accessory for field installations

Key Benefits
- Bright backlit display for easy night viewing
- Capable of displaying units in gallons, liters, inches, feet, meters or percent of liquid
- Optional relays provide convenient local alarms
- Receives power and signal via the transmitters current loop with minimal voltage drop

Compatible Products
- US01-03
  ECHOTOUCH®
  Ultrasonic Level Transmitter
- US06-12
  ECHOTOUCH®
  Ultrasonic Level Transmitter
- LR11
  ECHOPRO®
  Pulse Radar Level Transmitter
- LR36
  ECHOPRO®
  Pulse Radar Level Transmitter

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DS302110 REV A
Specifications

**Display type:** LCD, 5-digit top line  
8-digit bottom line  
**Display units:** Engineering  
**Display output:** -9999 to 99999 (top)  
-9999999 to 99999999 (bottom)  
**Display height:** 0.7” (17.8mm) top  
0.4” (10.2) bottom  
**Decimal point:** Floating  
**Backlight:** LED  
**Configuration:** Push button  
**Memory:** Non-volatile  
**Sensor input:** (1) 4-20 mA transmitter  
**Loop power:** 12-30 VDC  
**Voltage drop:** 1.5 VDC w/o backlight  
4.5 VDC w/ backlight  
**Contact type:** -10_1: N/A  
-12_1: (2) SPST relays (latching)  
**Contact rating:** -10_1: N/A  
-12_1: 1A @ 250 VAC/VDC res. load  
**Contact output:** -10_1: N/A  
-12_1: Normally open  
**Contact delay:** -12_1: 0-9,999 seconds  
**Repeater output:** -1_01: N/A  
-1_11: 4-20 mA, 7 to 30 VDC external power required  
**Process temp.:** F: -40° to 167°  
C: -40° to 75°  
**Ambient temp.:** F: -40° to 185°  
C: -40° to 85°  
**Enclosure type:** 1/8 DIN, panel mount  
**Enclosure rating:** NEMA 4X (IP65) faceplate  
**Enclosure mat'l:** PPE & PS blend  
**Faceplate mat'l:** Polycarbonate  
**Classification:** Intrinsically safe  
**Compliance:** CE  
**Approvals:** UL-C/UL  
Class I, Div 1, Groups A, B, C & D T4;  
Class II, Div 2, Groups A, B, C & D T4;  
Ex ia IIC T4 (Canada); Class I Zone 0, Zone 1, AEx ia IIC T4 (US);  
Class I Zone 2, Group IIC T4 (US)

Dimensions

Accessories

Protect your field mounted display from the elements with the below recommended single or two indicator box. For reliable power, add a LC95 power supply.

<table>
<thead>
<tr>
<th>P/N</th>
<th>DESCRIPTION</th>
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<tbody>
<tr>
<td>LM92-1002</td>
<td>Single indicator windowed, 1/8 DIN, PC</td>
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<tr>
<td>LM92-2002</td>
<td>Two indicator windowed, 1/8 DIN, PC</td>
</tr>
<tr>
<td>LC95-2001</td>
<td>100-240 VAC, 24 VDC @ 0.45A, 35mm rail</td>
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</tbody>
</table>

Ordering

**LI24** - 1

**CONFIGURATION** (1)

0  Display only  
2  Display with 2 relays

**REPEATER**

0  No repeater  
1  4-20 mA repeater

NOTES

1) For field mount installation in a NEMA 4X, polycarbonate windowed enclosure, order the single or two indicator box.