LED Transmitter Versions – Miniature Size

- LED indicators ideal in low or no ambient light
- Integral transmitter with choice of signal conditioned output
- Lengths to 10 feet (3 meters)
- Pressures to 400 PSI (27 bar) – Temperature to 300°F (149°C)

These Mini SureSite Indicators excel where zero and low ambient light make visual indicators difficult to read. These mini indicators feature all the benefits of a SureSite, like safe and durable stainless steel process fluid containment, while combining a continuous output transmitter with a bright LED channel.

The LED indicator assembly integrates a continuous level transmitter reducing overall footprint. A variety of signal conditioners provide the output you require. Forget the flashlights and squinting required to view antiquated sightglasses.

Typical Applications

• Pharmaceuticals • Medical Equipment • Food and Beverages
• Marine • Rail • Boilers

Specifications

Indication Length	5˝ to 120˝ (13 to 305 cm) in 0.5˝ (13 mm) increments
Media	Waters, Coolants, Light Oils, Diesel, Hydraulics
Specific Gravity	Minimum 0.8 SG to 1.2 SG
Materials	
Chamber Housing	316/316L Stainless Steel
Float	316/316L Stainless Steel
Shroud	Polycarbonate
O-Ring (Wetted)	Viton®, unless otherwise specified
J-Box Enclosure	Die cast Aluminum
Reliability and Durability	Expected 10 year service life
Performance	
Resolution	3/8˝ (9.5 mm)
Accuracy	±1/2˝ (13 mm)
Output Signal	4-20 mA to within ±3% of full scale
Temperature Ranges	
Process	-40°F to +300°F (-40°C to +149°C)
Ambient	-40°F to +160°F (-40°C to +71°C)
Operating Pressure	Vacuum to 400 psig (27.6 bar)
Environmental	Enclosure: NEMA 4X IP65 (Water Resistant)
Input Power	20 to 28VDC, @100mA. Consult Factory for other voltages
Outputs	4-20 mA continuous current loop (3 wire) 0-5 V continuous (3 wire) 0-10 V continuous (3 wire)
Mechanical Interface	Custom configured for tank (per mini SureSite offering), 1/2˝ NPT to junction box
Mounting Orientation	
Unit Positions	AM-L, BM-L, CM-L, DM-L
Shroud Position	See Selection Guide; Step 2 for Codes
Calibration	Field Adjustment Null and Span/Factory Calibrated

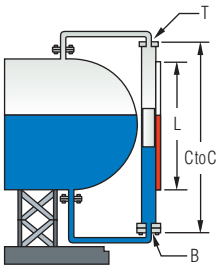
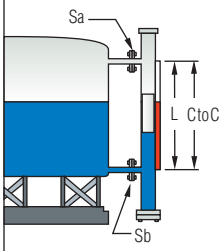
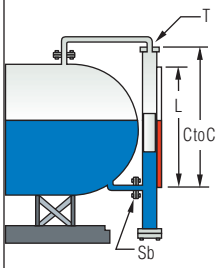
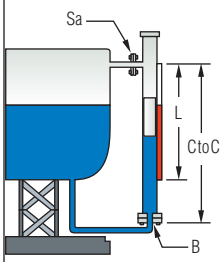
ORDER IT!
Ordering is Easy! See Page D-22.
Easy online ordering too!

1. Mounting Configuration Type

Based on process connection locations.

L = Length of Visual Indication

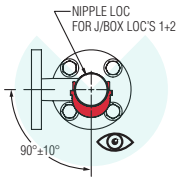
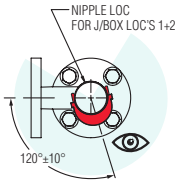
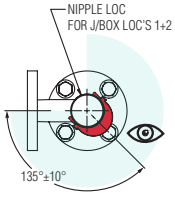
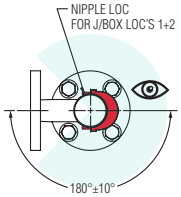
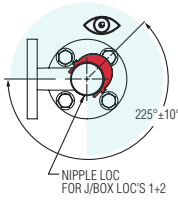
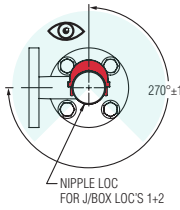
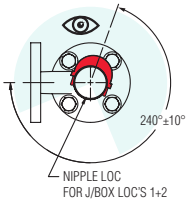
C to C = Length between process connections.* Gems will aid in determining this value.

	Type AM-L **Top and Bottom** Process Connections	Type BM-L **Side and Side** Process Connections	Type CM-L **Top and Side** Process Connections	Type DM-L **Side and Bottom** Process Connections
				
Typical Lengths*	C to C = L + 9.5″ (241 mm)	C to C = L	C to C = L + 6″ (152 mm)	C to C = L + 6″ (152 mm)
Length of Indication (Uninterrupted)	120″ (305 cm), Maximum			

* Formula provided is for approximation only. Final dimensions will vary due to connections type, position, cable or junction box location, and specific gravity of process liquid. Gems will confirm final dimensions before manufacturing.

2. LED Transmitter Assembly Location

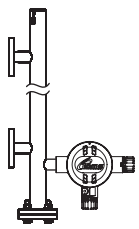
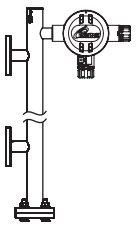
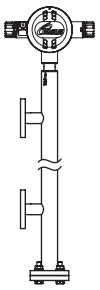
Position relative to process connection location. All illustration views are from the top. Codes with "+" indicate views when 3/4" side ports are used.

Transmitter Assembly Location Code						
A	**A+**	**B**	**C**	**D**	**E**	**E+**
						

Approximate angle of view - 270°

3. J-Box Location

Drawings are typical, and for reference only. Final, specific locations are determined at time of manufacture.

J-Box Location Code		
1 Side Mount Below Bottom Port	**2** Side Mount Above Top Port	**3*** Top Mount
		

* Requires a Blind Fixed Top Connection. See Connection Code T1 in the chart on next page.

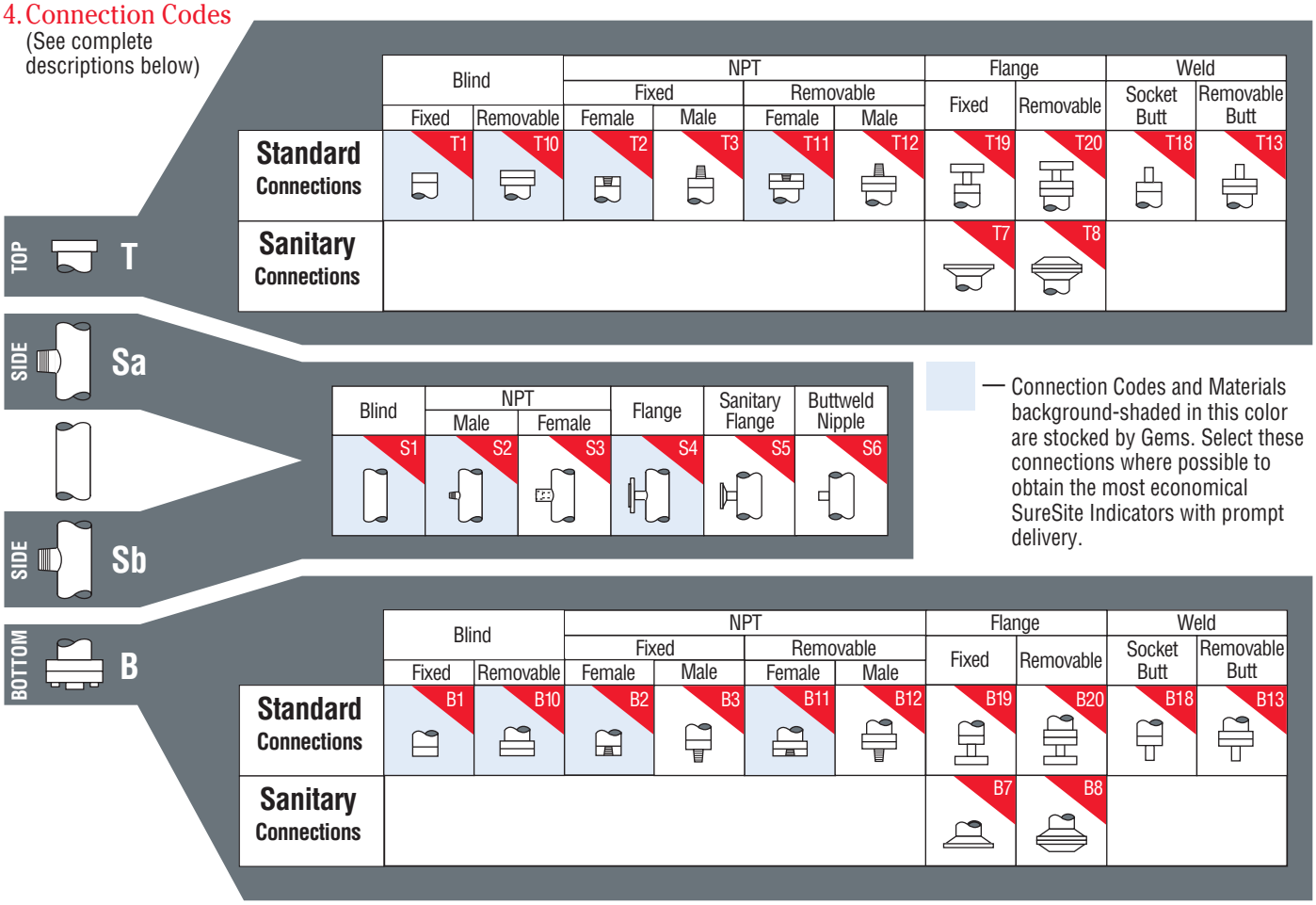
LED Assembly Cable Egress

For J-Box Location 1, LED Transmitter Assembly cable will egress from the bottom of the assembly.

For J-Box Locations 2 and 3, the cable will egress from the top of the assembly.

4. Connection Codes

(See complete descriptions below)



Connection Codes and Materials background-shaded in this color are stocked by Gems. Select these connections where possible to obtain the most economical SureSite Indicators with prompt delivery.

Note: Gems recommends a removable top and/or bottom connection for float access.

Connection Code Descriptions

Please provide all connections when completing the **OrderIt!** Product Check List (located on the following page).
Note: Before selecting your connections, consider incorporating your vent and drain requirements.

T & B (Top and Bottom)

T/B 1. Welded cap
T/B 2. Welded cap with FNPT
T/B 3. Welded cap with MNPT
T/B 7. Sanitary flange
T/B 8. Sanitary flange with mating blind flange
T/B 10. Standard fixed flange/mating blind flange
T/B 11. Standard fixed flange/mating FNPT reducing flange
T/B 12. Standard fixed flange/mating flange with MNPT nipple
T/B 13. Standard fixed flange/mating flange with butt weld nipple
T/B 18. Welded cap with butt weld nipple
T/B 19. Welded cap with ANSI flange
T/B 20. Standard fixed flange/mating reducing flange spool with ANSI flange

Sa & Sb (Sides)

S1. No connection
S2. MNPT nipple
S3. FNPT coupling
S4. ANSI flange
S5. Sanitary flange
S6. Buttweld nipple

5. Signal Conditioner Assemblies

Gems signal conditioners provide outputs for direct connection to a wide range of instrumentation. They are ideal for large, multi-tank complexes. Units with 4-20 mA outputs are particularly well suited for instrumentation control loops. Consult LED SureSite Installation, Operation and Maintenance bulletin.

☑ Product Check List

FAX IT!
860-747-4244

Photocopy This Form
Use one form for each product type you are selecting.
This form may also be completed online at gemssensors.com for RFQ.

This is a ☐ Request for a Quote
☐ Order P.O.# _____
Quantity Needed _____
Date Required ____/____/____
Shipping Method:_____
Partials Accepted: ☐ Yes ☐ No

Name _____
Company _____
Street _____
City_____ State ____ Zip_____
Phone (_____) _____
Fax (_____) _____
Email _____

LED SureSite Indicator/Transmitter, Alloy Versions – Miniature Size LED

Process Conditions

This information is essential to the accurate and proper operation of your SureSite® Visual Level Indicators. Please complete fully and accurately.

1. Pressure: Operating _____ psig Maximum _____ psig
2. Temperature: Operating _____ °F Maximum _____ °F
3. Liquid Media: _____
4. Specific Gravity @ Operating Condition: _____
5. Viscosity: _____ SSU
6. Application Location: ☐ Indoors ☐ Outdoors

Physical Configuration

1. Mounting Configuration Types:

☐ Type AM-L ☐ Type BM-L ☐ Type CM-L ☐ Type DM-L
Length of Visual Indication – **L**: _____ inches (120″, Max.)
Connection to Connection – **C to C**: _____ inches (calculated)

2. LED Transmitter Assembly Location:

1/2″ Side Ports: ☐ A ☐ B ☐ C ☐ D ☐ E
3/4″ Side Ports: ☐ A+ ☐ C ☐ E+

3. J-Box Location:

☐ 1 ☐ 2 ☐ 3

4. Connection Codes – **Complete all 4 connection code lines.** Check off NPT or Flange size where appropriate.

▼ Connection Code Number Goes Here. **Connection Code Numbers and their descriptions are on Page D-21.**

	NPT or Weld	Flange	
Top **T**	☐ 1/2″ ☐ 3/4″ ☐ Other _____	☐ 1/2″ ☐ 3/4″ ☐ 1″ ☐ Other _____	☐ 150# RF ☐ 300# RF ☐ Other _____
Side **Sa**	☐ 1/2″ ☐ 3/4″ ☐ Other _____	☐ 1/2″ ☐ 3/4″ ☐ 1″ ☐ Other _____	☐ 150# RF ☐ 300# RF ☐ Other _____
Side **Sb**	☐ 1/2″ ☐ 3/4″ ☐ Other _____	☐ 1/2″ ☐ 3/4″ ☐ 1″ ☐ Other _____	☐ 150# RF ☐ 300# RF ☐ Other _____
Bottom **B**	☐ 1/2″ ☐ 3/4″ ☐ Other _____	☐ 1/2″ ☐ 3/4″ ☐ 1″ ☐ Other _____	☐ 150# RF ☐ 300# RF ☐ Other _____

5. Supply/Conditioner:

Supply Voltage: ☐ 5 VDC ☐ 12 VDC ☐ 24 VDC
Output: ☐ 4-20mA ☐ 0-5 VDC ☐ 0-10 VDC

6. O-Ring Material:

☐ Viton® (Standard) ☐ Ethylene Propylene
☐ Other _____

Special Instructions (Materials, Connections, etc.)

_____
_____

Special Instructions (Materials, Connections, etc.)

_____
_____

Please contact GEMS Sensors Inc. for any configuration or special requirements not covered on this form. **800-378-1600**

Quote $ _____ Date Quoted ____/____/____

Gems™ Sensors & Controls

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