

96CONC Conductivity/Concentration Transmitter

- Large LCD display
- Friendly interface
- Robust enclosure
- Easy to use menus
- Multiple mounting methods
- Two-Wire loop power



LECOL 96 series was designed with the user in mind. Measurement information is easily read on the large liquid crystal display (LCD).

The graphic LCD screen can display multiple parameters simultaneously, including conductivity value, concentration value, mA output signal, temperature, Ω -cm, and smart function keys.

96 series transmitter's keypad interface is user friendly. The smart function keys can be used to navigate to three submenus: "calibrate", "output", and "configure".

The "calibrate" submenu is for sensor and output signal calibration. During calibration, output signal can be paused in "Output". All measuring parameters can be set through "Configure".

4-electrode conductivity/concentration transmitter can be configure as :

Conductivity

0~2,000,000 μ S/cm

Concentration

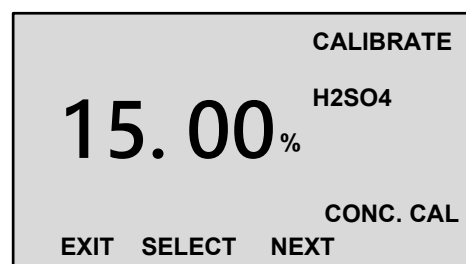
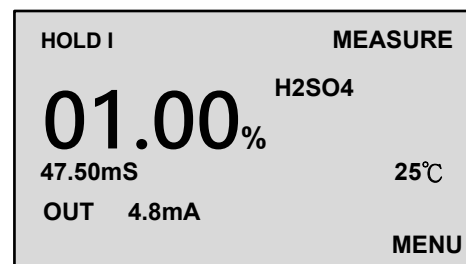
0~15% Sodium Hydroxide - NaOH

0~20% Sodium Chloride - NaCl

0~18% Hydrochloric Acid - HCl

0~20% Sulfuric Acid - H₂SO₄

User-defined concentration



Enclosure

The powder coated alloy housing meets NEMA 4X and IP54 requirements for use in harsh, industrial environments.

The metal housing suppresses noise and prevents the interference caused by electromagnetic environment.



Mounting Methods

Pipe, wall, and panel mounting options are available to provide flexibility in different installation scenarios.

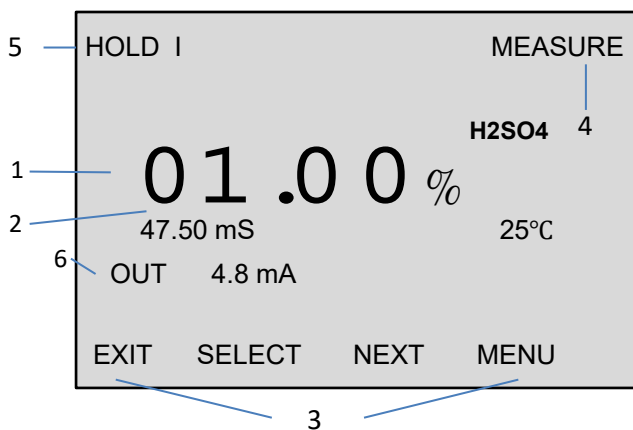
Calibration

Calibration is the process of adjusting the analyzer for accurate measurement. It can be conducted by two methods - comparison with a laboratory instrument or calibration of the sensor in a liquid standard.

Slope adjustments are easily made through a one point calibration using commonly available liquid conductivity standards.

The calibration mode provides the ability to calibrate sensor input, temperature input, and transmitter output. These functions referred to as calibrate states, include Process Variable calibration, temperature calibration, edit calibration, reset calibration, and output calibration.

Main screen displays



1. **Main display** – Display of primary measurement
2. **Minor display** – Additional measurements
3. **Function keys** – Select submenus:
Calibrate
Output
Configure
4. **Current mode** – Mode in use
5. **Hold Output** – Manual hold output at a specific value.
6. **Analog Output** – Analog output value



Selection Keys

There are four selection keys under the screen – EXIT, SELECT, NEXT, MENU. Use the selection keys to:

1. EXIT: To quit, cancel the function
2. SELECT: To select measurement function
3. NEXT: To continue the setting process
4. MENU: To select different measurement modes: calibration mode, output mode, and configuration mode



EXIT



SELECT



NEXT



MENU

Specifications

Type

Two-Wire conductivity/concentration transmitter

Display

240*128 dots graphic LCD display

Supply voltage

12~24 VDC, loop power

Power consumption

0.6W Maximum

Input range

0~2,000,000 $\mu\text{S}/\text{cm}$

0~15% NaOH

0~20% NaCl

0~18% HCl

0~20% H_2SO_4

User-defined concentration

Display resolution

1 $\mu\text{S}/\text{cm}$, 0.1%, 1 minimum display unit

Accuracy

+/- 2% of F.S.

+/- 1 °C

Temperature compensation

Manual, Automatic STD KCl,

0~15% NaOH, 0~20% NaCl

0~18% HCl, 0~20% H_2SO_4

Temperature sensor types

3k Ω Balco / PT100 / PT1000

Analog output

Isolated 4~20mA current output

Configurable conductivity range

0~200 $\mu\text{S}/\text{cm}$, 0~2,000,000 $\mu\text{S}/\text{cm}$

Configurable concentration range

Any type of concentration range

Minimum span

100 $\mu\text{S}/\text{cm}$ for conductivity

1% of concentration range

Lower display

Temperature, resistivity(conductivity), current output

Environmental

Operating temperature : -10 ~ 50 °C

Storage temperature : -20 ~ 70 °C

Operating humidity : 95% RH

Storage humidity : 95% RH

Enclosure

NEMA 4X and IP54

Aluminum alloy with polyester powder coating

Mounting

Panel, wall, pipe, and pipe mounting with weather shield

Certification

Low Voltage Directive 2014/35/EU, EN61010-1:2010

Electromagnetic Compatibility Directive 2014/30/EU EN 61326-1:2013 CE marked



Dimensions

Size : 144*144*177mm (H*W*D)

Panel cut : 135*135(± 0.2) mm

Weight

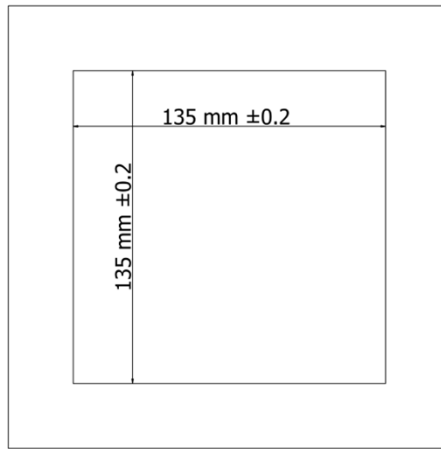
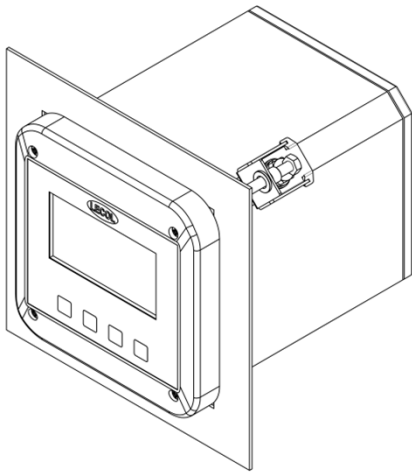
2.2 kg

3 kg with pipe mounting kits

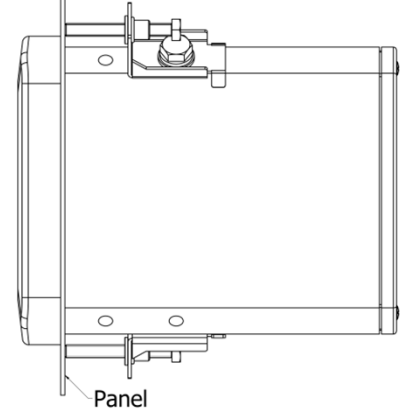
LECOL

Mounting types

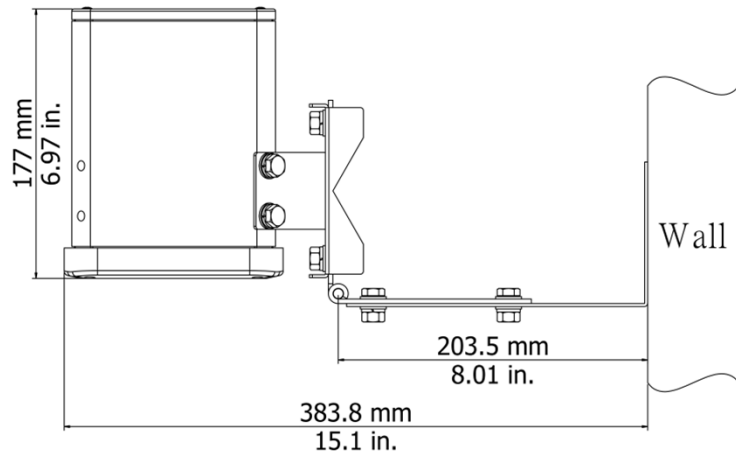
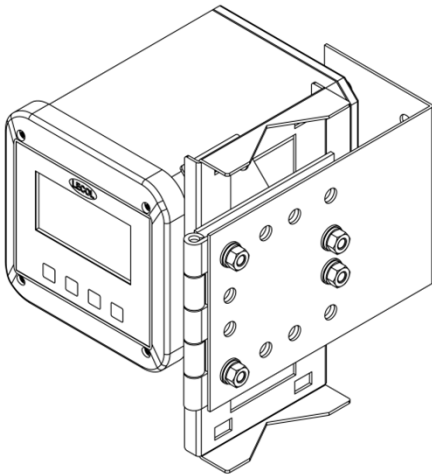
Panel mounting



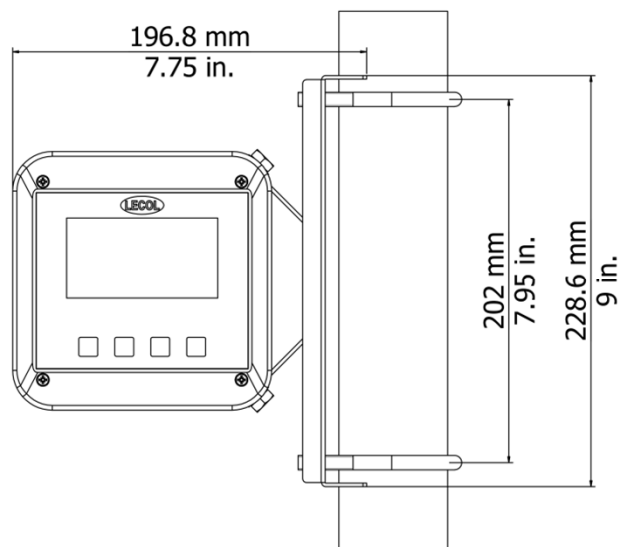
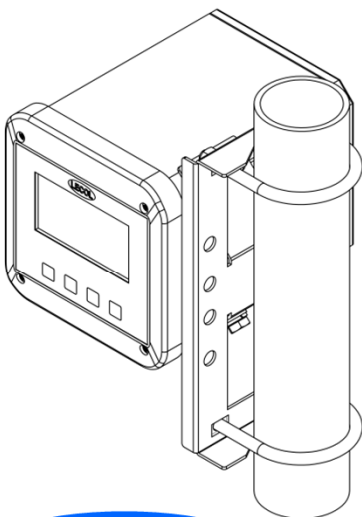
20mm(0.79 in.) max. panel thickness



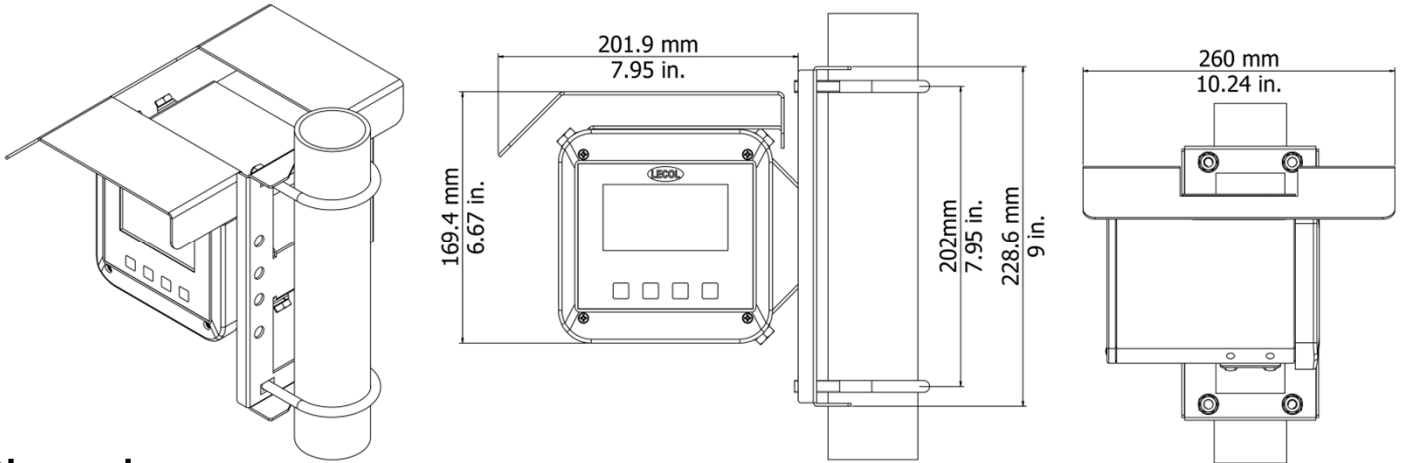
Wall mounting



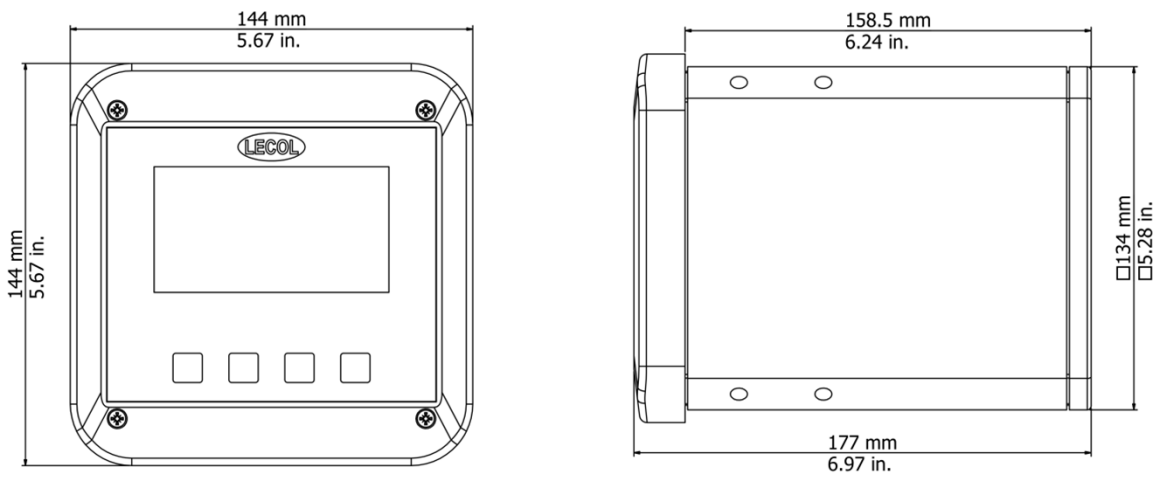
Pipe mounting



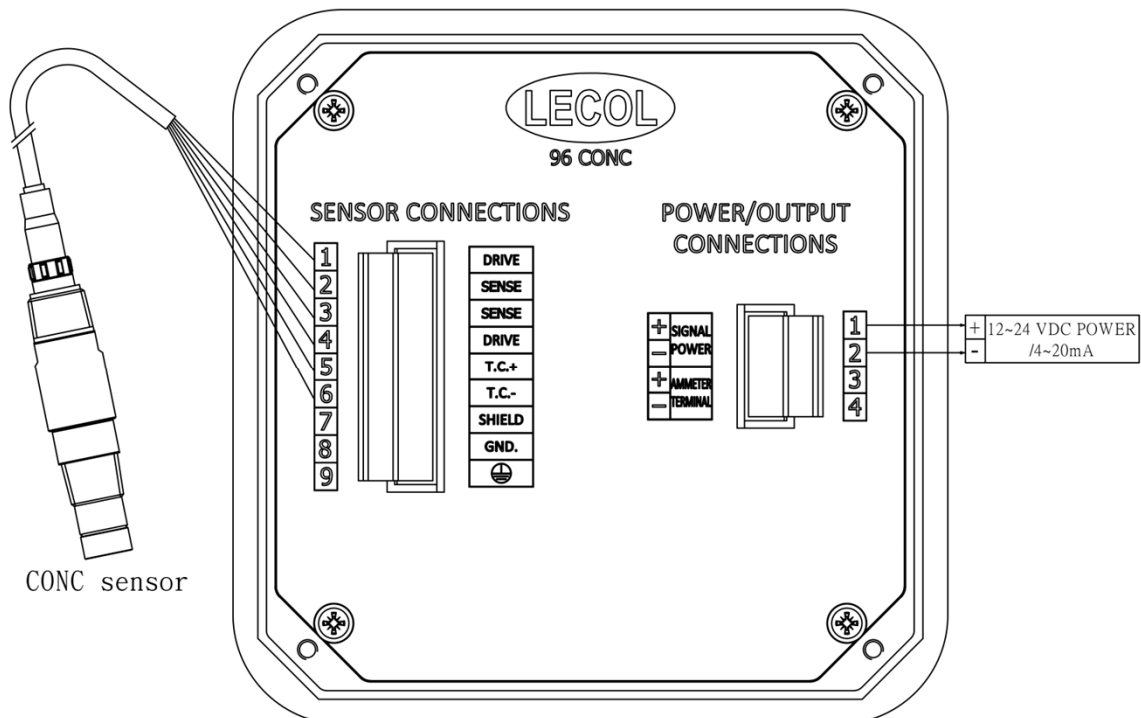
Pipe mounting with weather shield



Dimensions



Electrical & sensor wiring



Ordering information

Two-Wire Conductivity/Concentration Transmitter Model : 96CONC		()	()	()	()	()
A Programming options		(A)				
0	Basic					
1	Advanced					
B Mounting type			(B)			
0	Panel mounting					
1	Wall mounting					
2	Pipe mounting					
3	Pipe mounting with weather shield					
C Instruction manual				(C)		
0	Chinese (traditional)					
1	English					
D Others					(D)	
0	None					
1	Cable glands					
2	S.S. electrical adaptor -1/2" NPT					
E Identification Tag						(E)
0	None					
1	Stainless Steel					

*LECOL reserve the right to make technical changes or modify the contents of this document without prior notice.



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