

# 98COND Conductivity Transmitter

- Large LCD backlight display
- Friendly interface
- Robust enclosure
- Easy to use menus
- Multiple mounting methods
- 2 analog and 3 relay outputs
- Auto-cleaning function



LECOL 98 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, mA output signals, temperature,  $\Omega$ -cm, and smart function keys.

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

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

## Enclosure

The powder coated alloy housing meets NEMA 4X and IP65 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.

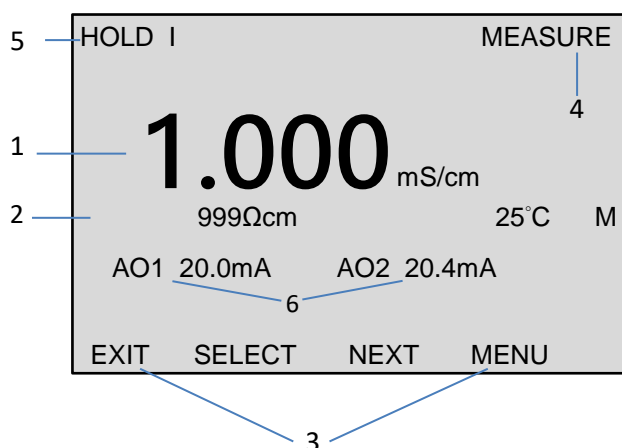
## Calibration

Calibration is the process of adjusting the analyzer to standards of use for accurate measurement. This 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 calibrate mode of 98COND transmitter provides the ability to calibrate the sensor input, temperature input, and transmitter outputs. 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 1 & Analog output 2

## 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



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## Specifications

### Type

Four-Wire conductivity transmitter

### Display

240\*128 dots graphic LCD display

### Supply voltage

100~240 VAC, 50/60 Hz

### Power consumption

Less than 15 W

### Input range

0.01 cell : 0 ~ 200  $\mu\text{S/cm}$

0.1 cell : 0 ~ 2000  $\mu\text{S/cm}$

1.0 cell : 0 ~ 20000  $\mu\text{S/cm}$

### Resolution

0.01 cell : 0.001  $\mu\text{S/cm}$

0.1 cell : 0.01  $\mu\text{S/cm}$

1.0 cell : 0.1  $\mu\text{S/cm}$

### Accuracy

+/- 2% of F.S.

+/- 1 °C

### Temperature compensation

Manual, Automatic

### Temperature sensor types

3k $\Omega$  Balco / PT100 / PT1000

### Analog outputs

Two isolated 4~20mA current outputs  
(user programmable)

### Configurable range

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

0 ~ 2000  $\mu\text{S/cm}$

0 ~ 20000  $\mu\text{S/cm}$

Temperature : 0 ~ 100 °C

### Minimum span

Conductivity : 1, 10, 100  $\mu\text{S/cm}$

Temperature : 10 °C

### Relay outputs

3 relay contacts SPDT, N.O. and N.C.  
(user programmable)

### Maximum contact ratings

100 VAC, 250 VAC, 3A

### Set points range

0.000 ~ 20000  $\mu\text{S/cm}$ , 0 ~ 100 °C

### Dead band

99.99 counts, 10 °C

### Time delay range

0.0~99.9 minutes

### Cleaner setting (Relay 3 only)

Cycle time range : 0.00 ~ 99.99 hours

On time range : 0.00 ~ 99.99 minutes

Recovery time range : 0.00 ~ 99.99 minutes

### Lower display

Temperature, resistivity, 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 IP65

Aluminum alloy with polyester powder coating

### Mounting

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

### Dimensions

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

Panel cut : 135\*135( $\pm 0.2$ ) mm

### Weight

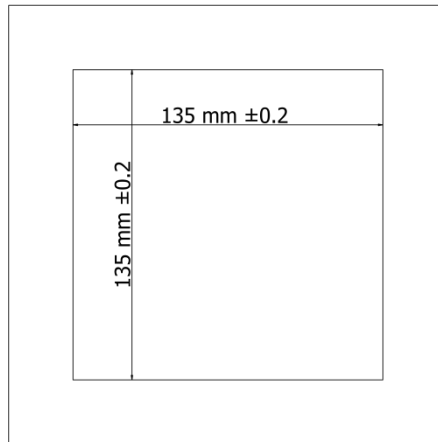
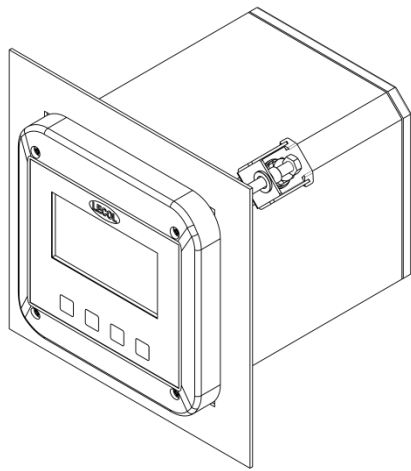
2.2 kg

3 kg with pipe mounting kits

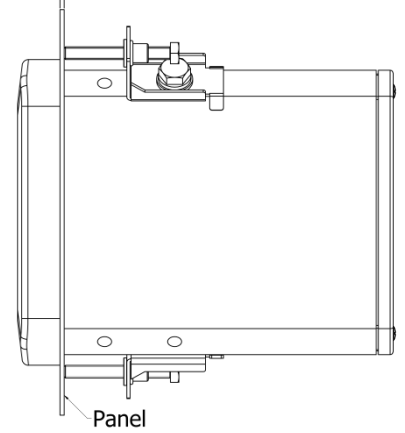
The logo for LECOL, featuring the word "LECOL" in white, bold, uppercase letters inside a blue oval shape.

# Mounting types

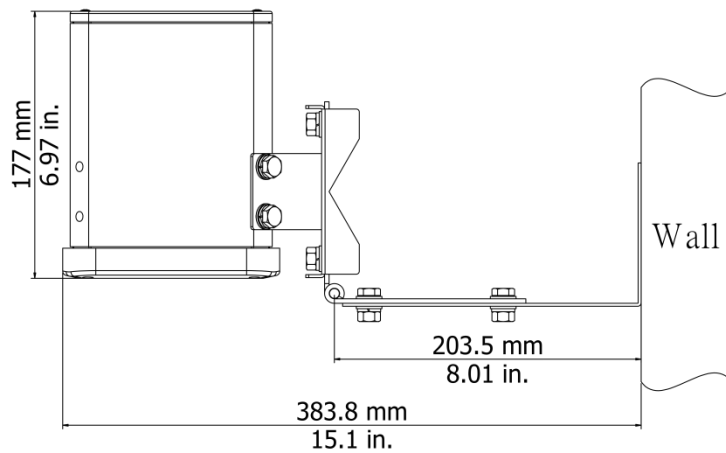
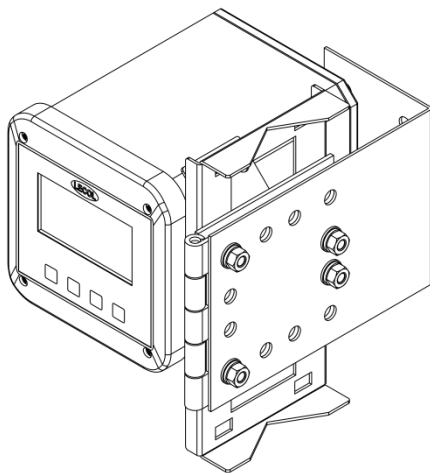
## Panel mounting



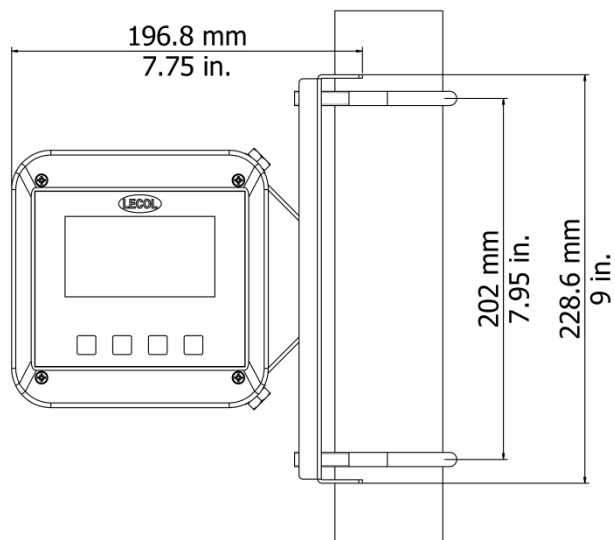
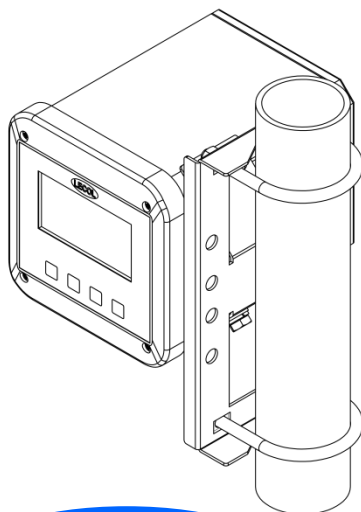
20mm(0.79 in.) max. panel thickness



## Wall mounting

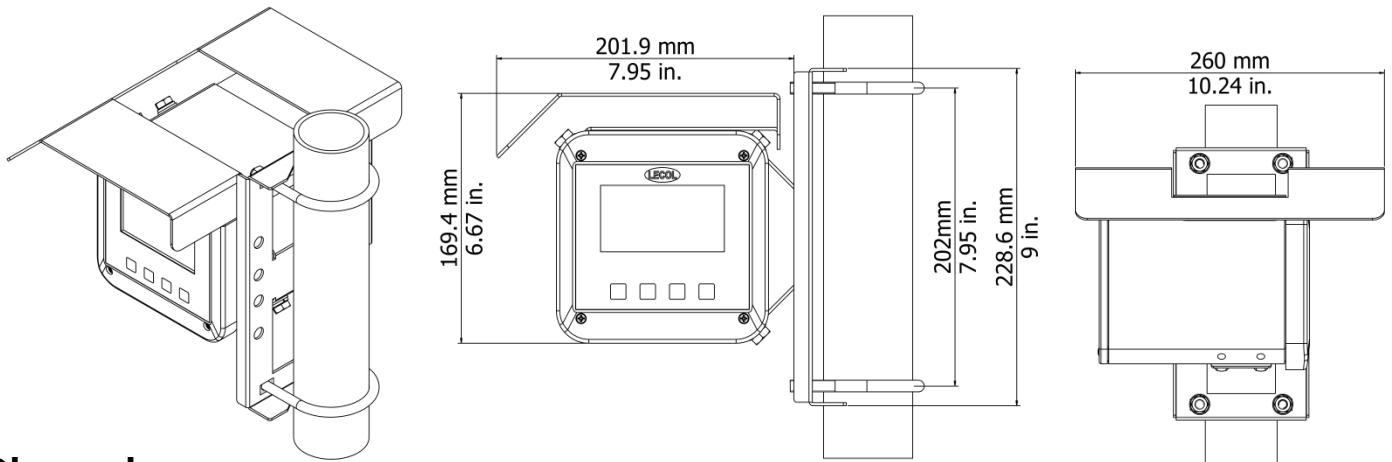


## Pipe mounting

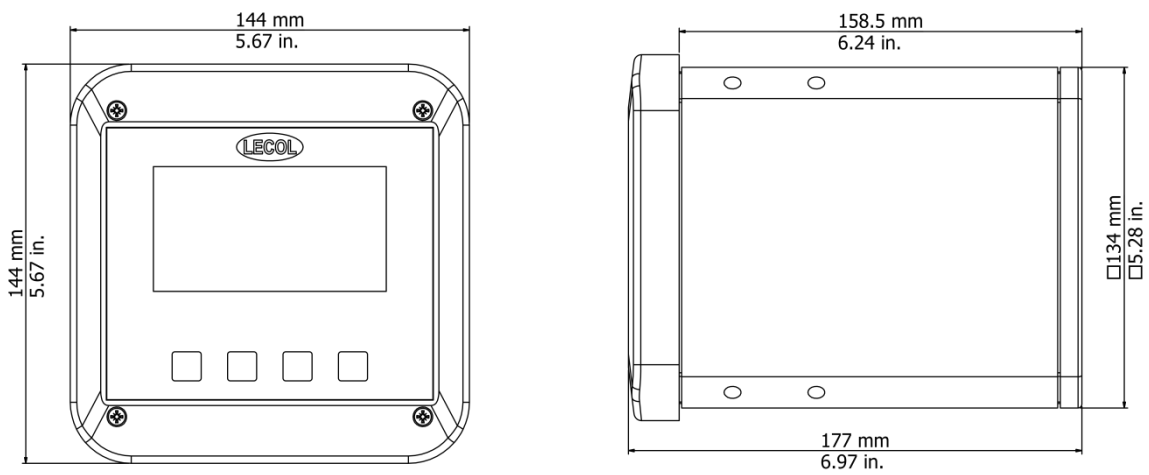


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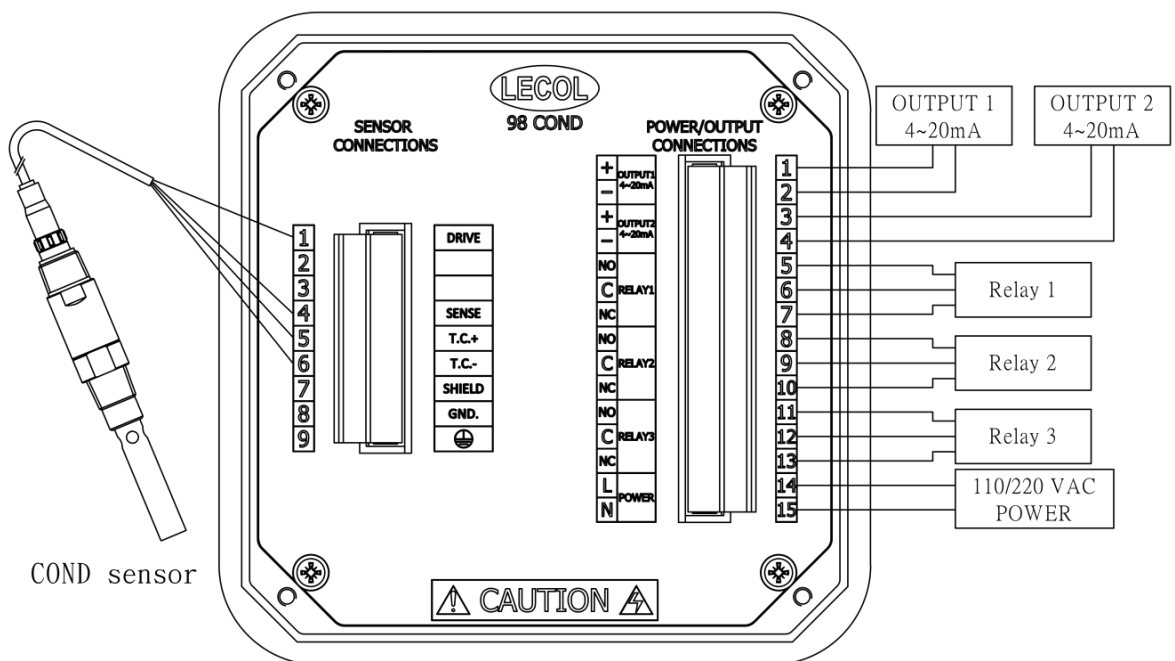
## Pipe mounting with weather shield



## Dimensions



## Electrical & sensor wiring



## Ordering information

<b>Four-Wire Conductivity Transmitter</b> <b>Model : 98COND</b>		(-)	(-)	(-)	(-)	(-)
<b>A Programming options</b>		(A)				
0	Basic					
1	Advanced					
<b>B Mounting type</b>		(B)				
0	Panel mounting					
1	Wall mounting					
2	Pipe mounting					
3	Pipe mounting with weather shield					
<b>C Instruction manual</b>				(C)		
0	Chinese (traditional)					
1	English					
<b>D Others</b>					(D)	
0	None					
1	Cable glands					
2	S.S. electrical adaptor -1/2" NPT					
<b>E Identification Tag</b>						(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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