



# LCD Digital Display

## General Instructions

These instructions provide information for installation, electrical connection, configurations, operation, and maintenance of the LCD digital indicating display. The display consists of explosion proof die cast aluminum housing, terminal block connections for easy wiring, and a LCD digital indicating loop powered display.



### Loop Powered Direct Mount Indicator Option LPCX

<b>Display</b>	0.6" (15.2 mm) LCD, 3½+ digits; -1999 to 2999
<b>Display Update Rate</b>	2 updates/second
<b>Display Orientation</b>	Display may be mounted at 90° increments up to 270° from default orientation.
<b>Overrange</b>	Display flashes 2999
<b>Underrange</b>	Display flashes -1999
<b>Programming Method</b>	4 Internal pushbuttons (behind glass).
<b>Noise Filter</b>	Programmable HI, LO, or OFF
<b>Recalibration</b>	Recalibration is recommended at least every 12 months.
<b>Max/Min Display</b>	Max/Min readings reached by the process are stored until reset by the user or until power to the meter is turned off.
<b>Non-Volatile Memory</b>	All programmed settings are stored in nonvolatile memory for a minimum of ten years if power is lost.
<b>Normal Mode Rejection</b>	64 dB at 50/60 Hz
<b>Environmental</b>	Operating temperature range: -40 to 75°C Storage temperature range: -40 to 75°C Relative humidity: 0 to 90% non-condensing Printed circuit boards are conformally coated.
<b>Connections</b>	Removable screw terminals accept 12 to 22 AWG wire

*Design and specifications are subject to change without notice.*

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## Input

<b>Input</b>	4-20 mA	
<b>Accuracy</b>	±0.05% of calibrated span ±1 count	
<b>Function</b>	Linear (2 to 32 points) or square root	
<b>Temperature Drift</b>	50 PPM/°C from -40 to 75°C ambient	
<b>Decimal Point</b>	User selectable decimal point	
<b>Minimum Span</b>	Input 1 & Input 2: 0.40 mA	
<b>Calibration Range</b>	An Error message will appear if input 1 and input 2 signals are too close together.	
	Input Range	Minimum Span Input 1 & Input 2
	4-20 mA	0.40 mA
<b>Maximum Voltage Drop &amp; Equivalent Resistance</b>	Without Backlight	With Backlight
	1.7 VDC @ 20 mA	4.7 VDC @ 20 mA
	85 Ω @ 20 mA	235 Ω @ 20 mA
<b>Loop-Powered Backlight Option</b>	Factory installed only. Powered directly from the 4-20 mA loop, no batteries required. Backlight can be enabled or disabled via alternative wiring of terminal block. The display brightness will increase as the input signal current increases.	
<b>Input Overload</b>	Over current protection to 2 A max.	
<b>HART Transparency</b>	The meter does not interfere with existing HART communications; it displays the 4-20 mA primary variable and it allows the HART communications to pass through without interruption. The meter is not affected if a HART communicator is connected to the loop. The meter does not display secondary HART variables.	

## Electronics Module

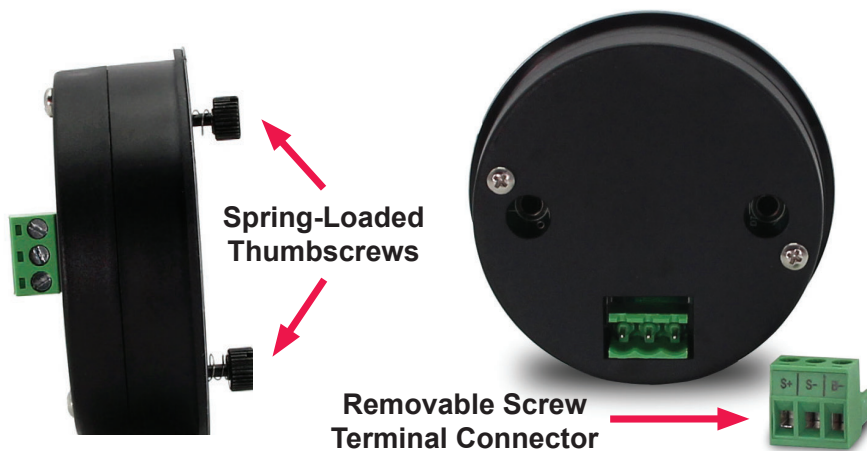
The electronics module is housed in a plastic enclosure that provides a degree of environmental protection for the electronics circuitry. The module is mounted to the enclosure with spring-loaded thumbscrews and can be oriented in 0°, 90°, 180°, or 270° increments. Connections are made to a removable screw terminal block.



Electronics Module



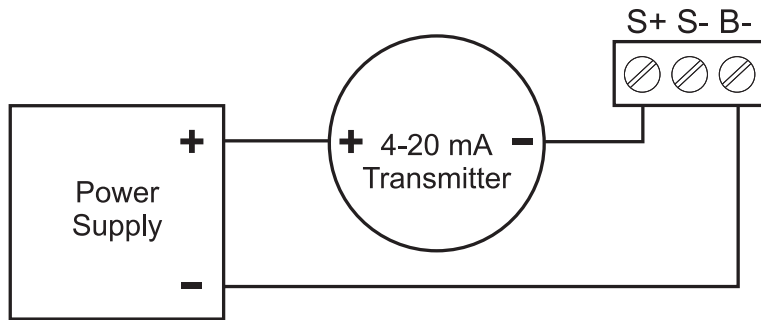
Back Cover & Connector



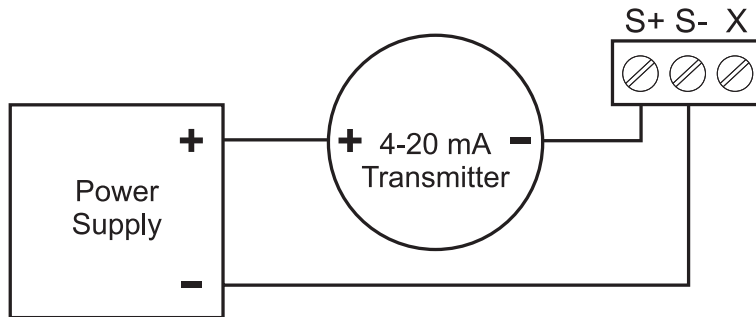
Spring-Loaded  
Thumbscrews

Removable Screw  
Terminal Connector

## Connections



Input Connections with Backlight



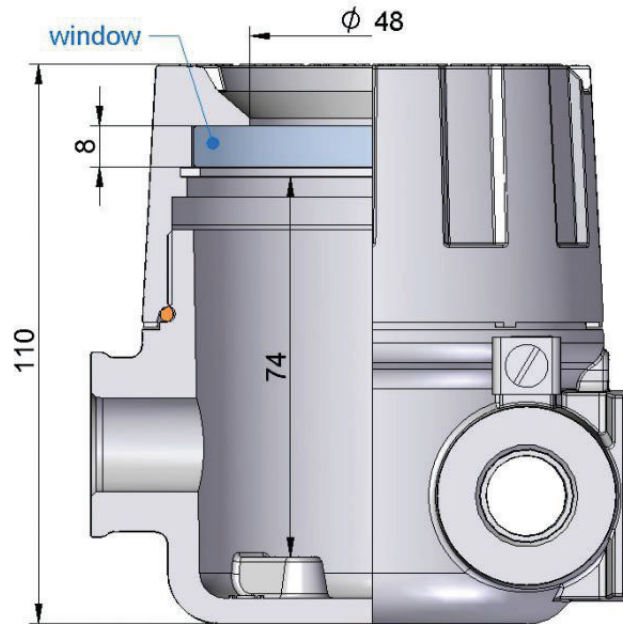
Input Connections without Backlight

## Programming

The display comes calibrated and scaled at the factory to display a 4.00 to 20.00 mA signal on startup. To change the scaling, follow along using the 4 button interface.



## Dimensions



## Maintenance

The SSi Temperature Sensor Digital Indicating Display contains no user serviceable parts and cannot be repaired on site. If display is not functioning correctly, please contact factory for assistance.



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