

## Overview



The SITRANS RD100 is a 2-wire loop powered, NEMA 4X enclosed remote digital display for process instrumentation.

## Benefits

- Easy setup
- Approved for hazardous locations
- NEMA 4X, IP67 impact-resistant enclosure
- Simple two-step calibration
- Two modes of input allow for easy servicing, with no interruption of loop required

## Application

The RD100 is very versatile. It can be installed indoors or outdoors, in hot or cold environments, and in safe or hazardous areas. It has been approved by FM and CSA as Intrinsically Safe and non-incendive, and operates from -40 to +85 °C (-40 to +185 °F), adding only 1 V to the loop.

Calibration consists of a quick two-step process involving the adjustment of only two non-interacting potentiometers.

- Key Applications: remotely displays process variables in level, flow, pressure, temperature, and weighing applications, in a 4 to 20 mA loop.

## Selection and ordering data

SITRANS RD100 Display Remote digital display for process instruments. 2-wire, loop powered, NEMA 4X enclosure.	Article No.						
	7ML5741-	●	●	A	0	0	- 0
Click on the Article No. for the online configuration in the PIA Life Cycle Portal.							
<b>Conduit hole location (½ inch)</b>							
None			1				
Bottom			2				
Rear			3				
Top			4				
<b>Approvals</b>							
FM/CSA				A			
CE				B			

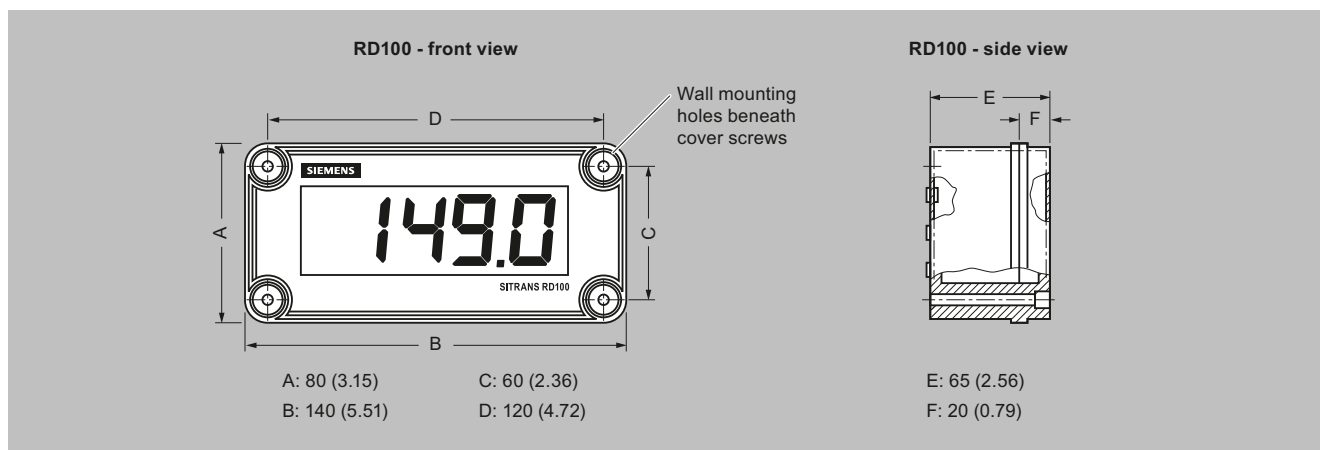
Selection and Ordering data	Article No.
<b>Operating Instructions</b>	
All literature is available to download for free, in a range of languages, at <a href="http://www.siemens.com/processinstrumentation/documentation">http://www.siemens.com/processinstrumentation/documentation</a>	
<b>Accessories</b>	
Panel mount kit	7ML1930-1BN
2 inch (5.08 cm) pipe mounting kit (stainless steel, Type 304, EN 1.4301)	7ML1930-1BQ

## SITRANS RD100

## Technical specifications

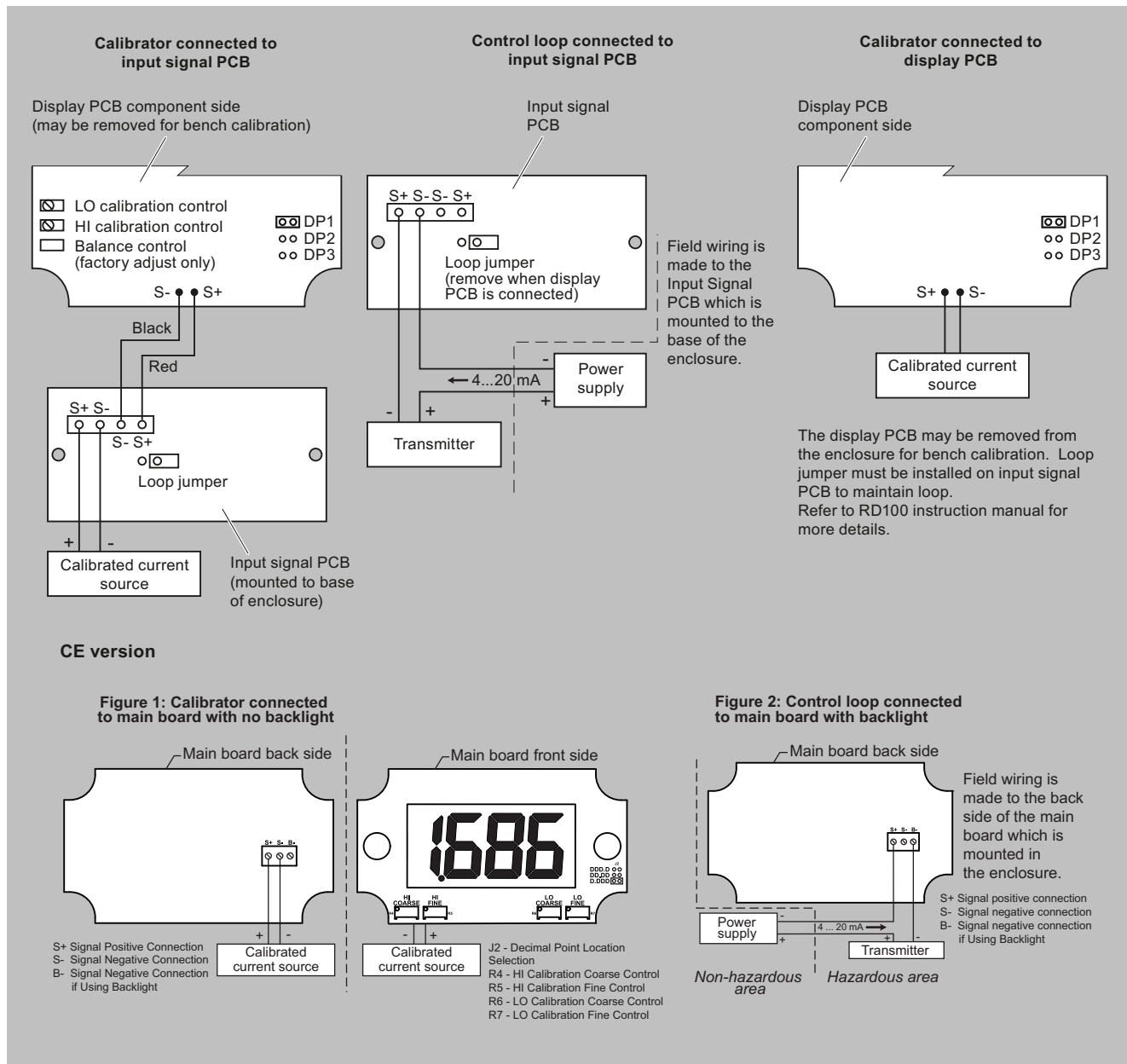
SITRANS RD100	
<b>Mode of operation</b>	
Measuring principle	Analog to digital conversion
Measuring range	4 ... 20 mA
Measuring points	1 instrument only
<b>Accuracy</b>	± 0.1 % of span ± 1 count
<b>Rated operating conditions</b>	
Ambient conditions	
• Operating temperature range	-40 ... +85 °C (-40 ... +185 °F)
• Storage temperature	-40 ... +85 °C (-40 ... +185 °F)
<b>Design</b>	
Weight	340 g (12 oz)
Material (enclosure)	Impact-resistant glass filled polycarbonate body and clear polycarbonate cover
Degree of protection	NEMA 4X, IP67
<b>Power supply</b>	
External loop power supply	30 V DC max.
<b>Display</b>	
	<ul style="list-style-type: none"> <li>• 1.0 inch (2.54 cm) high LCD</li> <li>• Numeric range from -1 000 ... +1 999</li> </ul>
<b>Certificates and approvals</b>	
Non-hazardous	CE
Hazardous	
• Intrinsically Safe	<ul style="list-style-type: none"> <li>• CSA/FM Class I, II, III, Div. 1, Groups A, B, C, D, E, F, G T4</li> <li>• CSA/FM Class I, Zone 0, Group IIC</li> </ul>
• Non-incendive	<ul style="list-style-type: none"> <li>• CSA/FM Class I, Div. 2, Groups A, B, C, D</li> <li>• CSA/FM Class II and III, Div. 2, Groups F and G</li> </ul>
<b>Options</b>	
Mounting	<ul style="list-style-type: none"> <li>• 2 inch (5.08 cm) pipe mounting kit (zinc plated or stainless steel)</li> <li>• Panel mounting kit</li> </ul>

## Dimensional drawings



SITRANS RD100, dimensions in mm (inch)

Circuit diagrams



SITRANS RD100 connections