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 ºC (-40 to +185 ºF), adding only 1 V to the loop.

The RD100 has a large 1” (2.54 cm) high display making it easy to read.

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.

**Technical specifications**

**Mode of operation**
- Measuring principle: Analog to digital conversion
- Measuring range: 4 to 20 mA
- Measuring points: 1 instrument only
**Accuracy**: ±0.1 % of span ±1 count

**Rated operating conditions**
- Ambient conditions: -40 to +85 ºC (-40 to +185 ºF)

**Design**
- Weight: 340 g (12 oz)
- Material (enclosure): Impact-resistant glass filled polycarbonate body and clear polycarbonate cover
- Degree of protection: NEMA 4X, IP67

**Power supply**
- External loop power supply: 30 V DC max.

**Display**
- 1.0” (2.54 cm) high LCD
- Numeric range from -1000 to +1999

**Certificates and approvals**
**Hazardous**
- Intrinsically Safe
  - CSA/FM Class I, II, III, Div. 1, Groups A, B, C, D, E, F, G T4
  - CSA/FM Class I, Zone 0, Group IIC
- Non-incendive
  - CSA/FM Class I, Div. 2, Groups A, B, C, D
  - CSA/FM Class II and III, Div. 2, Groups F and G

**Options**
- Mounting: 2” (5.08 cm) pipe mounting kit (zinc plated or stainless steel)
- Panel mounting kit

**Selection and Ordering data**

**Order No.**

**SITRANS RD100**
- 30 V DC max.
- A 2-wire loop powered, NEMA 4X enclosed remote digital display for process instrumentation.

<table>
<thead>
<tr>
<th>Conduit hole location (½”)</th>
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<tbody>
<tr>
<td>None</td>
</tr>
<tr>
<td>Bottom</td>
</tr>
<tr>
<td>Rear</td>
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<tr>
<td>Top</td>
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**Instruction manual**
- English: 7ML1998-5JU01
- French: 7ML1998-5JU11
- German: 7ML1998-5JU31

Note: The instruction manual should be ordered as a separate line item.

This device is shipped with the Siemens Milltronics manual CD containing Quick Starts and instruction manuals.

**Accessories**
- Panel mount kit
- 2” (5.08 cm) pipe mounting kit (zinc plated seal)
- 2” (5.08 cm) pipe mounting kit (stainless steel, Type 304, EN 1.4301)

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Dimensional drawings

SITRANS RD100 dimensions

Schematics

SITRANS RD100 connections