



# True level control for general industry

With the reliability of Sonic Intelligence echo processing



## MultiRanger

Answers for industry.

**SIEMENS**



## Signal processing with field experience

Siemens MultiRanger 100/200 are high performance ultrasonic level controllers that offer reliable and consistent performance. MultiRanger uses non-contacting ultrasonic technology to provide continuous level measurement for any short- to medium-range application up to 15 m (50 ft). MultiRanger can measure a wide range of materials including fuel oil, municipal waste, acids, woodchips, and solids with high angles of repose. This cost-effective controller is available in two versions: MultiRanger 100 is for simple level measurement or pump control and MultiRanger 200 has more advanced features such as differential level, open channel measurement and advanced pump control and alarming. Both versions are available in wall or panel mount.

- Simple setup and programming with handheld infrared programmer or via SIMATIC PDM
- Sonic Intelligence – our field proven echo processing algorithms guarantee the most reliable performance available
- Unmatched beam angle – stronger pulse and sensitivity in a compact beam make our ultrasonics transducers the most reliable in the industry
- Million in one – our products have the field experience of over a million points of level built into every device
- Global network – sales and support in your neighborhood. Our extensive global coverage means you get sales and support when and where you need it.



### MultiRanger 100/200

#### Power

- AC version: 100 to 230 V AC  $\pm 15\%$ , 50/60 Hz, 36 VA/17 W
- DC version: 12 to 30 V DC, 20 W

#### Performance

<b>Measurement points</b>	Single or dual point
<b>Measurement range</b>	0.3 to 15 m (1 to 50 ft), dependent on transducer
<b>Accuracy</b>	0.25% of program range* or 6 mm (0.24"), whichever is greater
<b>Resolution</b>	0.1% of program range* or 2 mm (0.08"), whichever is greater

#### Interface

<b>Display</b>	100 x 40 mm (4 x 1.5") multi-field backlit LCD
<b>Communication</b>	<ul style="list-style-type: none"> <li>• Built-in Modbus® RTU or ASCII via RS-485 or RS-232</li> </ul> Options: <ul style="list-style-type: none"> <li>• PROFIBUS DP</li> <li>• Allen-Bradley® Remote I/O</li> <li>• DeviceNet™</li> </ul>
<b>Programming</b>	<ul style="list-style-type: none"> <li>• Patented infrared handheld programmer</li> <li>• SIMATIC PDM</li> </ul>
<b>Outputs</b>	<ul style="list-style-type: none"> <li>• Two 0/4 to 20 mA outputs</li> <li>• All relays rated 5A at 250 V AC, non-inductive</li> </ul> Options: <ul style="list-style-type: none"> <li>• One relay (Form A) (MultiRanger 100)</li> <li>• Three relays (two Form A / one Form C) or</li> <li>• Six relays (four Form A / two Form C)</li> </ul>
<b>Inputs</b>	<ul style="list-style-type: none"> <li>• 2 discrete inputs for contact level device</li> <li>• mA input (MultiRanger 200 only)</li> </ul>

#### Mechanical

<b>Enclosure</b>	<ul style="list-style-type: none"> <li>• Wall mount: Type 4X/NEMA 4X/IP65, polycarbonate</li> <li>• Panel mount: Type 3/NEMA 3/IP54, polycarbonate</li> </ul>
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#### Process conditions

<b>Ambient temperature</b>	-20 to 50 °C (-5 to 122 °F)
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#### Compatible transducers

XRS-5, XCT-8, XCT-12, XPS-10, XPS-15, ST-H

#### Approvals

CE, CSA<sub>NRTL/C</sub>, UL Listed, FM

\* Program range is defined as the empty distance to the face of the transducer plus any range extension. Allen-Bradley is a registered trademark of Rockwell Automation. DeviceNet is a trademark of Open DeviceNet Vendor Association. Modbus is a registered trademark of Schneider Electric. MultiRanger and Sonic Intelligence are registered trademarks of Siemens Milltronics Process Instruments Inc. SIMATIC PDM is a registered trademark of Siemens AG. Specifications are subject to change without notice.  
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