True level control
for general industry

control

MultiRanger

MultiRanger 100/200
- Continuous level ultrasonic controller for applications up to a 15 m (50 ft) range
- Single or dual point model. Dual point model can monitor two vessels and reduce per point cost
- AC or DC models available
- Two discrete inputs for contact level devices to provide back-up overflow protection
- MODBUS® RTU via RS-232 and -485
- Two 4 - 20 mA outputs
- Compatible with SIMATIC® PDM software for set-up and diagnostics
- Field proven Sonic Intelligence® echo processing for superior reliability
- Auto-False Echo Suppression to avoid false echoes from fixed obstructions within the ultrasonic beam path
- Wall or panel mount versions

MultiRanger 100
- Basic level monitor for solid and liquid applications
- Simple ON/OFF pump control with automatic pump alternation

MultiRanger 200
- Enhanced pump control algorithms for enhanced performance
- Differential control for bar screens / rake control
- Open channel flow monitor and totalizer
- Volume conversion to display volume instead of level
- One mA input

million in one

MultiRanger® is a high performance ultrasonic level controller that offers reliable and consistent performance. It 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 be used on 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 for simple level measurement and pump control and MultiRanger 200 with more advanced features such as differential level, open channel measurement and advanced pump control and alarming. Both versions have wall or panel mount options.

www.siemens.com/level

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Technical specifications

	MultiRanger 100/200
Power	
	■ AC version: 100 - 230 VAC ±15%, 50/60 Hz, 36 VA/17W ■ DC version: 12 - 30 VDC 20W
Performance	
Points of measurement	Single or dual point
Measurement range	0.3 to 15 m (1 to 50 ft) dependent on transducer
Accuracy	0.25% of program range* or 6 mm (0.24"), whichever is greater
Resolution	0.1% of program range* or 2 mm (0.08"), whichever is greater
Interface	
Display	100 x 40 mm (4 x 1.5") multi-field back lit LCD
Communication	■ Built-in Modbus RTU or ASCII via RS-485 or RS-232 Options: • PROFIBUS DP • ALLEN-BRADLEY® Remote I/O • DeviceNet™
Programming	■ Patented infrared hand-held programmer ■ SIMATIC PDM ■ Dolphin Plus®
Outputs	■ Two 0 - 20 mA or 4 - 20 mA outputs ■ All relays rated 5A at 250 VAC, non-inductive Options: • One relay (Form 'A') (MultiRanger 100) • Three relays (2 Form 'A' / 1 Form 'C') or • Six relays (4 Form 'A' / 2 Form 'C')
Inputs	■ 2 discrete inputs for contact level device ■ mA input (MultiRanger 200 only)
Mechanical	
Enclosure	■ Wall mount: Type 4X/NEMA 4X/IP65, polycarbonate ■ Panel mount: Type 3/NEMA 3/IP54, polycarbonate
Process Conditions	
Ambient temperature	-20 to 50 °C (-5 to 122 °F)
Compatible transducers	
	XRS-5, XCT-8, XCT-12, XPS-10, XPS-15, ST-H
Approvals	
	CE**, $CSA_{NRTL/C}$, UL Listed, FM

* Program range is defined as the empty distance to the face of the transducer plus any range extension.

Specifications are subject to change without notice.

Certification No. 002284

Million in one

Signal processing with field experience

Siemens level measurement instruments come with extensive field experience. Siemens Milltronics developed the signal processing technology for level instruments based on the experience of a million instruments in industrial applications.

With this experience we understand the importance of reliability, and we know what it takes to make a trusted and accurate level instrument for demanding applications. That's why our engineers invented Sonic Intelligence and Auto False-Echo Processing, and that's why these instruments carry so many patents. With Siemens Milltronics you get the experience of a million applications in one instrument.