



True level control for the water/wastewater industry

With the reliability of Sonic Intelligence echo processing



HydroRanger 200

Answers for industry.

SIEMENS



Level measurement in the water/wastewater industry

HydroRanger® 200 is an economical, low-maintenance ultrasonic level measurement solution delivering control efficiency and productivity that meets today's strict environmental legislations. This controller is ideal for simple level measurement and pump control or for more advanced applications such as differential level, open channel measurement, and advanced pump control and alarming. HydroRanger 200 can control up to six pumps and measure water and wastewater of any consistency up to a 15 m (50 ft) depth.

- Non-contacting – transducer is immune to problems caused by suspended solids, harsh corrosives, grease, or silt in the effluent
- Simple setup – easy to install and program with the handheld infrared programmer or via SIMATIC PDM
- Sonic Intelligence® – our field proven echo processing algorithms guarantee the most reliable performance available
- Unmatched beam angle – strong pulse and sensitivity in a compact beam make our ultrasonic 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.

HydroRanger 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

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

Mechanical

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

Ambient temperature	-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_{NRTL/C}, UL Listed, FM, MCERTS

* 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. HydroRanger 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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