

ROSEMOUNT™ WIRELESS LEVEL INSTRUMENTATION



Making your plant safer and life easier



“ Better information from difficult-to-reach areas of the mill is helping our personnel prevent unscheduled downtime, meet customers quality requirements and optimize productivity.”

Gary Borham, Wheeling-Pittsburgh Steel

What if you could...



Make a huge difference with one simple step?



Free up time with automated measurements?



Stay safe from spills while optimizing your tank usage?

More than 10,000 systems



Over one billion+
OPERATING HOURS

It's easier than you think





Wireless level measurement - a simple step to make a huge difference

- + **Overflow prevention / secondary high level alert**
- + **Level monitoring**
- + **Interface level monitoring**
- + **Dry run prevention**

Wireless technology opens the door into areas previously out of physical or economic reach. Remote locations, physical obstructions, high engineering costs, and integrating new technologies are no longer barriers.

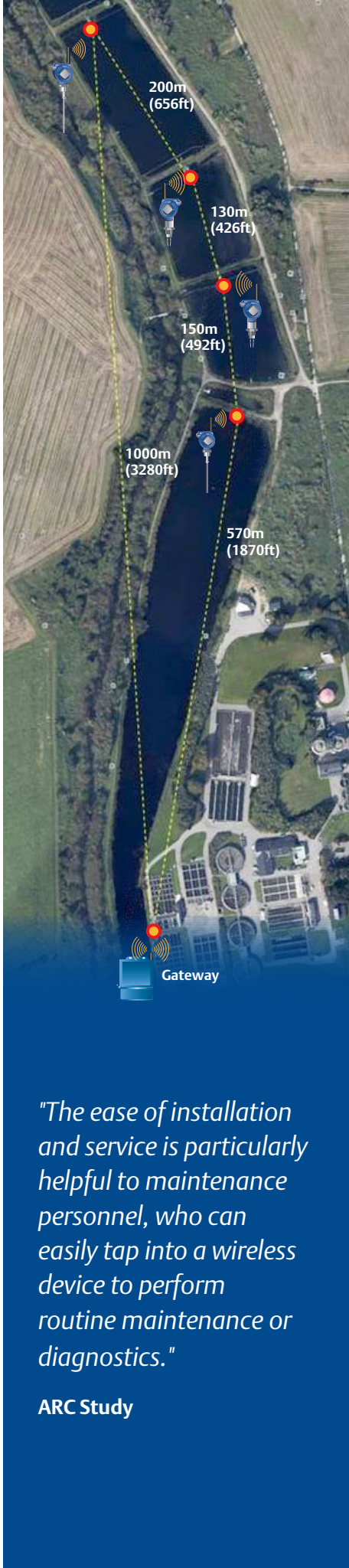
- + Automate your process and realize cost savings of up to 60% compared with traditional wired devices
- + Minimal installation rules required: expand easily by adding up to 100 devices per Smart Wireless Gateway
- + Self-organizing network automatically optimizes communication paths with over 99% data reliability



Rosemount
2160 Wireless
Vibrating Fork
Level Switch



Rosemount 3308
Wireless Guided
Wave Radar
Transmitter



Free up your time with automated measurements

With remote access to process data and advanced diagnostics for predictive maintenance, scheduled operator rounds and climbing the tank to make visual inspections are things of the past. Get the most out of your day by spending less time to know more.

- + Remote access to transmitter measurement and configuration from the gateway, control room or a central location
- + Graphical and intuitive user interface enables rapid diagnosis of emerging issues
- + Reduced maintenance with field replaceable, intrinsically safe power modules providing 10 years serviceable life



"The ease of installation and service is particularly helpful to maintenance personnel, who can easily tap into a wireless device to perform routine maintenance or diagnostics."

ARC Study

Whether you are 10 feet away or 100 miles away, you can still see how your device and process are performing



Stay safe from spills while optimizing tank usage

Overfill presents a risk to the environment, damage to plant and potential harm to workers and people living nearby. Regulations are setting ever-higher demands for level automation. Redundant level measurement is vital, but in many cases, lack of an existing cable infrastructure makes it cost-prohibitive to provide level measurement and alarm solutions. With wireless level measurement from Emerson™ you get improved site safety and reliable measurement with no surprises.

- + Added redundancy and compliance with stringent safety regulations
- + No re-calibration required and virtually no maintenance
- + Robust and accurate measurements unaffected by changing process conditions
- + No surprises with proactive, actionable alerts from process and device health diagnostics



Enhanced diagnostics alert you before contamination, corrosion, or damage to wetted parts becomes a problem

Products and specifications



Rosemount 3308
Wireless Guided Wave Radar



Rosemount 2160
Wireless Vibrating Fork Level Switch

Measurement mode	Liquid continuous level and/or interface level	Liquid point level
Output	WirelessHART® IEC62591	WirelessHART IEC62591
Update rate	User selectable 4 seconds to 60 minutes	User selectable 1 second to 60 minutes
Power module life	9 years	10 years
Accuracy /Repeatability	±0.25 in (±6 mm) / ±0.08 in (±2 mm)	N/A
Maximum measuring range	56 ft (17 m)	N/A
Minimum dielectric constant	2.0	N/A
Hysteresis	N/A	±0.039 in. (±1 mm)
Process temperature	94 to 302 °F (-40 to +150 °C)	94 to 500 °F (-70 to +260 °C)
Process pressure	-14 to 580 psig (-1 to 40 bar)	-14 to 1450 psig (-1 to 100 bar)
Certification	Intrinsically safe	Intrinsically safe, overfill protection (DiBt/WHG)

Wireless Gateway 1410, 1420

Protocol	WirelessHART IEC62591
Legacy integration	EtherNet/IP™, HART® protocols, Modbus®, OPC
Host integration	Ovation™, DeltaV™
User interface	Web interface, AMST™ Wireless configurator, AMS device manager
Network size	Up to 25 or 100 devices
Installation	Class 1/Div2 or Zone2 (DIN rail cabinet, wall mount, pipe mount)



Additional wireless level instrumentation

3051S, 3051 and 2051 Wireless DP Level Transmitters	Complete offering to meet expanding application needs Industry standard proven technology
702 Discrete Transmitter	Installation-ready solution providing dual discrete inputs Single or dual switch input with logic for limit contact and opposing contact applications
Smart Wireless THUM™ Adapter	Allows any device compliant with HART 5 (and later revisions) to wirelessly transmit measurement and diagnostic information



For complete specification details, please refer to product data sheet.

“...as “doing more with less” becomes a more prominent theme within the industry, the question that every operator should be asking isn’t **why should we use wireless?**—it’s **why shouldn’t we?**”

Zach Wertenberger, Senior Automation Engineer,
WPX Energy

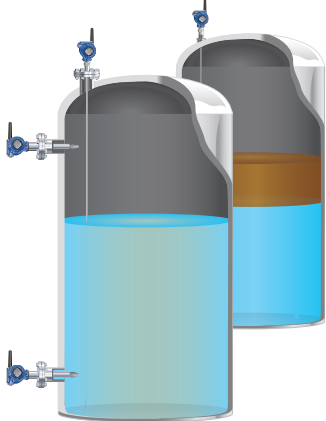


A variety of applications: Solved wirelessly

- + Remote locations
- + Moving infrastructure
- + Rapid plant expansions
- + Retrofit and upgrades

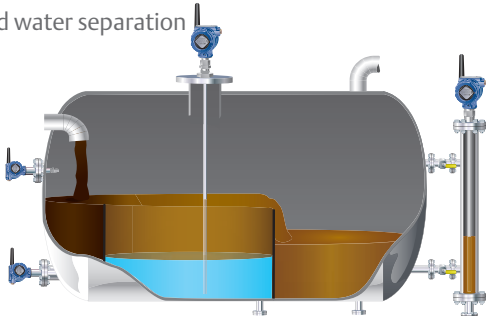
Storage, buffer or waste tanks

- + Oil and condensate
- + Chemicals
- + Acids
- + Water/Wastewater
- + Lube oil



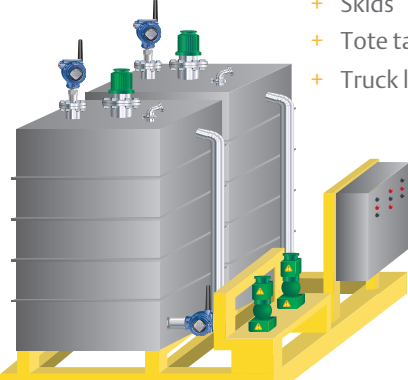
Separators

- + Oil and water separation



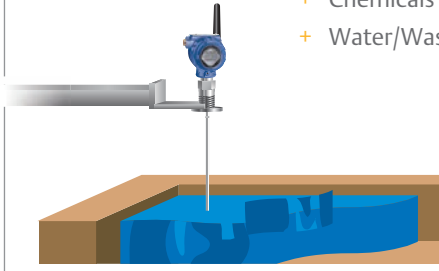
Moving infrastructure

- + Skids
- + Tote tanks
- + Truck loading arms



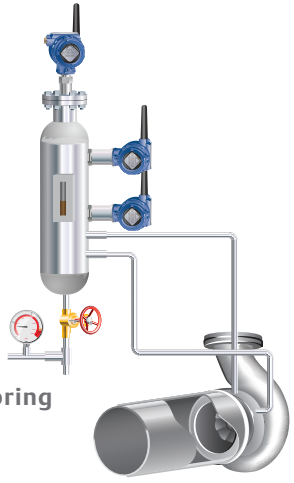
Underground tanks

- + Oil and water separations
- + Chemicals
- + Water/Wastewater



Open air installations

- + Settling ponds
- + Reservoirs
- + Water intake
- + Bunds
- + Open sumps



Pump seal fluid monitoring

- + Seal fluid reservoirs
- + Piston accumulators


For more information on industry leading wireless level instrumentation, visit us at www.Rosemount.com/Level

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