

# Temperature Measurement Assembly with Rosemount™ X-well™ Technology

Accurately measure process temperature without a thermowell or process penetration



## CHALLENGE

Surface temperature measurement does not provide an accurate or repeatable representation of the internal process temperature. Conversely, while accurate, temperature measurement points using thermowells are complex to design and install, increase the risk of process leaks and lead to high maintenance costs.

## OUR SOLUTION

Rosemount X-well Technology provides a complete point solution for accurately measuring internal process temperature without the requirement of a thermowell or process penetration. This capability delivers an accurate process temperature while simplifying specification, installation and maintenance, and eliminating possible leak points.

## HOW IT WORKS

- Rosemount X-well Technology calculates a repeatable, accurate internal process temperature measurement based on thermal conductivity properties of the temperature assembly and process piping
- Industry first process temperature accuracy specification from a surface measurement

### WHAT IF YOU COULD ACCURATELY MEASURE PROCESS TEMPERATURE WHILE...

...reducing installation time and cost?

...improving plant availability and lowering maintenance costs?

...improving environmental compliance and safety?



Rosemount 3144P and 0085 Temperature Measurement Assembly with Rosemount X-well Technology




Rosemount 648 and 0085 Temperature Measurement Assembly with Rosemount X-well Technology

For more information visit  
[www.Emerson.com/Rosemount-X-well](http://www.Emerson.com/Rosemount-X-well)  
or contact your local Emerson™ Sales Representative



# Temperature Measurement Assembly with Rosemount X-well Technology

## OPEX SAVINGS

 Increase Production	 Reliability + Safety	 Reduce Life Cycle Cost
<p><b>Add temperature measurement points without process shutdown</b></p> <ul style="list-style-type: none"> <li>• Increased throughput</li> </ul> <p><b>Accurate temperature measurement</b></p> <ul style="list-style-type: none"> <li>• Improved quality</li> <li>• Energy savings</li> </ul>	<p><b>No possible leak points</b></p> <p><b>Measurement point does not contact process/unaffected by</b></p> <ul style="list-style-type: none"> <li>• Wake frequency</li> <li>• Corrosion</li> <li>• Abrasive fluids</li> <li>• Viscous fluids</li> <li>• Bending stresses</li> </ul>	<p><b>Reduced maintenance frequency</b></p> <p><b>Simplifies calibration</b></p> <p><b>Easier maintenance</b></p> <ul style="list-style-type: none"> <li>• No removal for pigs</li> <li>• No lockout/tagout</li> </ul> <p><b>Redesign not required for retrofit</b></p>


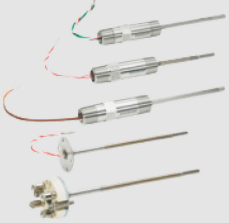


## ORDERING

The Rosemount 3144P Temperature Transmitter or 648 Wireless Temperature Transmitter can be ordered with Rosemount X-well Technology via the “PT” model code option and must be factory configured with the addition of the “C1” model option code which requires user supplied information of process pipe material and pipe schedule. When using Rosemount X-well Technology, the Rosemount 3144P or 648 is required to be assembled to the Rosemount 0085 Pipe Clamp RTD Sensor in a direct mount configuration.

### Enhanced performance




PT	Temperature Measurement Assembly with Rosemount X-well Technology
----	---

## EMERSON'S FULL PORTFOLIO OF TEMPERATURE SOLUTIONS

Temperature Thermowells	Temperature Sensors	Wireless Temperature Transmitters	Wired Temperature Transmitters
			

### Global Headquarters

Emerson Automation Solutions  
6021 Innovation Blvd.  
Shakopee MN 55379  
USA

 +1 800 999 9307 or +1 952 906 8888  
 +1 952 949 7001  
 RFQ.RMD-RCC@EmersonProcess.com

Standard Terms and Conditions of Sale can be found at [www.Emerson.com/en-us/pages/Terms-of-Use.aspx](http://www.Emerson.com/en-us/pages/Terms-of-Use.aspx)  
The Emerson logo is a trademark and service mark of Emerson Electric Co.  
X-well Technology, Rosemount and Rosemount logotype are trademarks of Emerson Electric Co.  
All other marks are the property of their respective owners.  
©2017 Emerson. All rights reserved.

00807-0200-4648 Rev BA

## Consider it Solved.

Emerson Automation Solutions supports you with innovative technologies and expertise to address your toughest challenges. For more information, visit [Emerson.com/Rosemount-X-well](http://Emerson.com/Rosemount-X-well)

**ROSEMOUNT**<sup>™</sup>

  
**EMERSON**<sup>™</sup>