Wireless Pressure Gage Modernization

Pressure Measurement for all industries

Problem: Bourdon or Bellows Pressure Gauge Measurement

The most commonly used instrument for process monitoring in any industrial plant is the bourdon or bellows dial pressure gage. They exist in a variety of configurations: gauge, compound, absolute, etc. and in a variety of styles; direct mount, liquid filled, seal connection, etc. Operators and plant personnel must devote time-consuming labor to periodically monitor or record readings. The gages are often installed in locations that are remote or that expose operators or plant personnel to hazardous areas or products. Being the most widely used pressure measuring device, there are millions of pressure gages installed in hundred of industrial plants.

The periodic reading of the numerous pressure gages installed in the plant requires plant personnel to spend time to collect and document data from each particular gage. In the current economy, this has become a problem for most plant managers. In addition to being time consuming, these measurements are, in general, low accuracy, not consistent and the readings are not "time-stamped". Additional time will be later spent if the data has to be transcribed, with probability of mistakes during the transcription.

With the requirement for a more effective use of plant personnel on critical tasks in the plant, the solution is to install a local pressure gage that can be remotely monitored yet still provide a local display for reading by plant operators if necessary. Prohibitive wiring costs prevent the installation of conventional pressure transmitters.

<u>Solution:</u> Honeywell XYR 5000 Wireless Pressure Indicating Transmitter

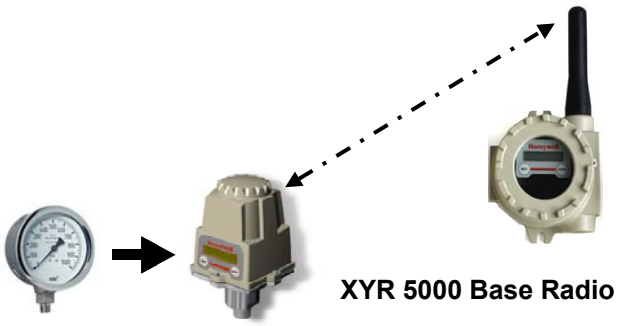
The new Honeywell XYR 5000 Wireless pressure transmitter wirelessly transmits measurements to a "Base Radio" connected to a control system or data acquisition device such as a recorder or PC. It also has a local indication of the pressure and can be directly mounted in the existing location to replace mechanical pressure gages.

The XYR 5000 Pressure Transmitters can be configured for different duty cycles, provide greater accuracy, precise time tracking and replace manual readings with automated online measurements.

The new Honeywell XYR 5000 Wireless Pressure Transmitters broadcast process data to an access point remotely installed in a central location or control room without the need for installation of signal wires.

Key benefits of the Honeywell XYR 5000 Wireless Pressure Transmitter are:

- Reliable performance using Frequency Hopping Spread Spectrum (FHSS) operating in the 902 – 928 MHz ISM license-free band
- Easy configuration using integral buttons.
- Diagnostics.
- Powered by C size 3.6 VDC Lithium battery with expected life of up to 5 years.
- **0.1% accuracy,** which is much better than bourdon or bellows dial pressure gauges.
- Gauge Pressure ranges 30, 250, 1000 and 5000 psig.
- Absolute Pressure ranges 30 and 250 psia.
- Industries include Refineries, Pulp & Paper, Chemical, Oil&Gas, Power Generation.



XYR 5000 Wireless Pressure Transmitter

Honeywell XYR 5000 Wireless Pressure Transmitters

Honeywell not only provides best in class field instrument, but also offers economical yet reliable wireless solutions to meet different application needs and budgetary constraints. This includes temperature, acoustic and analog measurement using Wireless technology.

Honeywell XYR 5000 Wireless Family

Designed to integrate seamlessly with control systems such as Honeywell Experion PKS®, XYR 5000 Wireless Transmitters provide information that helps you achieve your key objectives

- **Cost** – Honeywell XYR 5000 Wireless Transmitters reduce installation costs through wiring savings — as much as $10 to $40 per foot — and via easier, faster installation.

- **Time** – Simplified installation means faster start-ups and accelerated profits.

- **Range** – The instruments transmit measurements up to a distance of 2,000 feet (line of sight).

- **Ruggedness** – Rated for industrial use, XYR 5000 transmitters go where you don't want to: hazardous, remote, or hard-to-access locations.

- **Resource Constraints** – When required, trained Honeywell Service personnel can augment your plant or mill instrumentation staff for installation, engineering, or ongoing maintenance.

Additional Benefits from Use of the Honeywell Wireless Solution

Self-Diagnostics:
• **Low Battery Alarm**
• **Contains extensive self-checking software** and hardware that continuously monitors the operation. Any sensor or device parameter out of spec is identified and reported

Broad Operating Temperature Range
• -40 °F to +185 °F (-40 °C to +85 °C)

Rugged Construction
• 316 L, 316 or 17-4 pH wetted parts
• GE Lexan housing (passes UL 746C "Outdoor Weatherability Specification").

Honeywell Wireless XYR 5000 Pressure Transmitter Details

Description	Model
Wireless Gauge Pressure Transmitter	**WG511**
Wireless Base Radio	**WBR-MB, RS**

Honeywell

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