Remote Analytical Measurements

Honeywell OneWireless wireless transmitters enable automated monitoring of variables in areas where traditional hard-wired transmitters are too costly, difficult or time-consuming to implement. Whether applications are remote, without access to power, difficult to reach, or in hazardous areas, Honeywell's wireless solutions deliver needed information easily, flexibly, and affordably.

Regulatory fines or citations may result from unmonitored discharge of storage locations such as lagoons, ponds, holding tanks, pits stream discharge or leaks around chemical plants or refineries. Remote analytical measurements are often necessary but not implemented due to the high cost. Wiring a transmitter to a monitoring station can cost $20-$80 per foot.

Until now, remote measurement of pH, ORP, dissolved oxygen and conductivity has not been available for these applications.

Honeywell's XYR™ 5000 wireless transmitter combined with Honeywell's DirectLine transmitter and a commercially available solar power system are the obvious and economical solution to this problem.

This self-contained and self-powered solution utilizes proven Honeywell technology and a commercially available solar power system to monitor up to two measurements remotely and economically.

The Honeywell wireless transmitter is powered by long life, self contained battery and requires no licensing or special set up. The DirectLine module is powered by the solar system and has a battery back-up for extended periods of low sun or dark.

The wireless transmitter and the DirectLine transmitter are simple to set-up, requiring only hours to complete an installation. Whereas a wired solution requires a significant investment in time and money to run the signal and power back to the monitoring station.

The Honeywell XYR 5000/DirectLine wireless solution eliminates physical and economical barriers to remote monitoring of analytical measurements. This solution excels in limited or no power remote locations, where manual or no readings are made today, allowing plants to:

- Reduce opportunity for regulatory fines
- Reduce installation, maintenance and operating costs
- Improve plant safety by monitoring remote sites

Sample Bill of Materials	Model Number	Description	Quantity
Choose Radio			
2000' Transmission	WI551-DA-AG or 3G	XYR 5000 wireless transmitter	1
	WBR-00-MBPWRS-000000-0000-AK or 3D	Base radio omni antenna	1
5000' Transmission	WI553-DA-AG or 3G	XYR 5000 wireless transmitter with hi-gain antenna	1
	WBH-00-MBPWRS-000000-TWHC-9X or 3X	Base radio high gain antenna	1
Purchase Solar System [1]			
Solar Power System	SELS5-XX-AOC/DC TO DC	5 watt solar system with35 AH battery back-up, pole mount, and 12-18 vdc converter regulator from SEPCO	1
Choose Measurement(s) [2]			
pH Measurement	DL421-E-8-B-0000	DirectLine pH Module	1
	51453503-005	Durafet III pH Electrode	1
DO Measurement	DL424-E-6-B-0000	DirectLine ppm DO Module	1
	DL5PPM-700-00000	DirectLine Dissolved Oxygen Probe	1

Notes:

1) Solar power supply to be purchased from SEPCO (sepconet.com); 772.220.6615.
2) All DirectLine models can be use with these solutions.

XYR 5000 Wireless Transmitters Installation Savings

Estimated Wiring Costs ($/foot)	500 feet	1000 feet	1500 feet	2000 feet	Typical Rates
$20	$10,000	$20,000	$30,000	$40,000	Typical rates for standard wiring
$40	$20,000	$40,000	$60,000	$80,000	
$60	$30,000	$60,000	$90,000	$120,000	Union or X-proof environment rates
$80	$40,000	$80,000	$120,000	$160,000	

Honeywell Remote Analytical Measurements
(a) Honeywell Wireless Analog Signal Transmitter
(b) Honeywell Wireless Transmitter Base Radio
Honeywell Smart Sensors
(c) Honeywell DirectLine Modules and Sensors

More Information

For more information on Honeywell's OneWireless solutions, visit our website www.honeywell.com/ps/wireless, or contact your Honeywell account manager.

Automation & Control Solutions
Process Solutions
Honeywell
2500 W. Union Hills Dr.
Phoenix, AZ 85027
Tel: +1-602-313-6665 or 877-466-3993
www.honeywell.com/ps

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