

## Wireless Tank Level Measurement

**Industry:** Chemical  
**Products:** EJX110B (Differential Pressure Transmitter)  
 YFGW710 (Field Wireless Integrated Gateway)



### Introduction

Both bulk and finished inventories are stored in distributed tank farm remote from the site operations. These are difficult to instrument due to the infrastructure cost involved and therefore in



These are then monitored daily by patrol rounds. While effective, this method does require a large skilled labor force to monitor all of tanks. This can impose an additional risk when the stored medium is of a hazardous nature.

### Benefits

- Improved quality of measurements (accuracy, frequency & elimination of potential human error)
- Increased safety by removing the operations such as patrol from a potentially dangerous environment

- Elimination of field wiring and associated installations costs
- Digging of a trench is not required when deploying wireless instruments



- Reduced maintenance effort, battery life of 10 years with 30sec updates can be realized

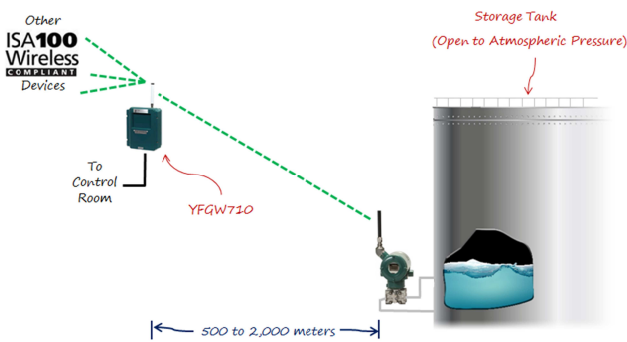


### Requirements

- To provide a live hydrostatic measurement of a bulk product receiving tank. The tank is an open vessel, vented to atmosphere.

**Solution**

A direct mount wireless level transmitter was installed on the existing tapping for the mechanical gauge. The wireless gateway was installed at the control room, some 300m distant.



**Result**

The tank level was monitored remotely over a period of 2 years to prove the quality of the solution. An RSSI of -83dBm and PER of 0% were achieved.

**Conclusion**

Significant costs savings were realized whilst also improving the quality and safety of the required measurement. The customer is now looking to expand the wireless network to other vessels to improve the visibility of their bulk inventories.

For close vessel applications with or without a Nitrogen gas blanket, you can use either the EJX110B differential pressure transmitter or EJX118B diaphragm sealed differential transmitter. These allow you to measure both the level and blanket pressure independently with just one device.

